

Advertisements for this Supplement must be prepaid, and can be received at the Office, 42 Cannon Street, until 5 p.m. on Thursday afternoon, or by first post on Friday morning of each week.

Remittances payable to EDWARD HALSE, crossed MARTIN & CO. Stamps are taken in payment.

The Terms for Advertisements in this Supplement will be found printed under each heading.

allow this opportunity to pass without thanking you for the unremitting attention you have always shown. I must confess I had grave misgivings concerning your alteration from monthly to weekly publication; but, instead of fears, they are a pleasurable knowledge that business has increased wonderfully. (32/22.) OFFICE: 42 CANNON STREET, LONDON, E.C.

CHEMISTS' TRANSFERS.

CO.. 32 LUDGATE HILL, E.C., MESSRS. ORRIDGE TRANSFER AGENTS,

May be consulted at their offices on matters of SALE, PURCHASE, and VALUATION. Immediate attention given to Foreign Commissions. The Business conducted by Mesers, Orange & Co. has been known as a Transfer Agency since the year 1846, and is well known to all the leading firms in the Trade. VENDORS have the advantage of obtaining an opinion on Value derived from extensive experience, and are in most cases enabled to avoid an infinity of trouble by making a selection from a list of applicants for purchase, with the view of submitting confidential particulars to those alone who are most likely to possess business qualifications and adequate means for investment. PURCHASERS who desire early information regarding eligible opportunities for entering business will greatly facilitate their object by describing clearly the class of connection they wish to obtain. Particulars of any of the following will be sent free on application:—

1.—WESTERN COUNTY.—In a good business town, an Established Concern, easily worked and capable of great extension; returns nearly £300; value of stock and fixtures only required.

2.—LONDON SUBURB, S.W.—Good-class Dispensing and Light Retail; returns nearly £600, with good profits; shop handsomely fitted in mahogany; good house and garden; price £600.

3.—SUFFOLK.—Very old-established Business of good class; returns £1.200, with good profits; good house, best position in town; small premium and valuation only required.

4.—LONDON S.W.—Established Batail and Dispensing Business.

4.—LONDON, S.W.—Established Retail and Dispensing Business, with Dentistry; held by vendor many years; returns nearly £700 yearly; good house; rent moderate; price £600.

5.—HOME COUNTY.—Large town; good-class Retail and Dispensing, with Post-Office attached; returns nearly £900; profits above the average; large shop and good house; price about £850, or offer.

price £650. N.B.—No Charge to Purchasers. Other Businesses, Town and Country; particulars free on application. Personal applicants receive Messrs. O. & Co.'s direct attention and advice, where required, free.

The VALUE of "THE CHEMIST & DRUGGIST."

TESTIMONY BY ADVERTISERS.

We have recently received many expressions of satisfaction from Advertisers, and amongst them is the following note:

I am most gratified with the results of my advertising in your paper. I consider it by far the better journal for business than any other published. Facts speak for themselves. I find THE CHEMIST AND DRUGGIST mentioned ten times where other of our Trade Journals are once. I cannot allow this emportunity to press without the business way for the unremitting

 $6.-LONDO\,N,~W.C.-$ Good Ready-money Business, Mixed; returns £2,000 yearly; net profits about £600; very genuine concern and worth attention; price about £1,000, or any reasonable offer.

7.—ESSEX.—Unopposed Business of good class; returns nearly £750; very old-established; good house; moderate rent; price about £700. 8.—LONDON SUBURB S.E.—Death vacancy, for immediate ale; situate in a commanding position; the value of stock and fixtures

9.—SOMERSET —Good Family Retail and Dispensing, with Stationery attached; returns nearly £1,350 yearly; good house; moderate rent; price, to include horse, trap, &c., £1,200.

10-KENT.--Good market town; Retail and Dispensing; returns nearly £800, with good profits; large double-fronted shop and good house;

VALUATIONS.—TERMS FOR VALUATION ON APPLICATION. APPOINTMENTS BY POST OR WIRE HAVE IMMEDIATE ATTENTION.

only required.

ORRIDGE & CO., 32 Ludgate Hill, LONDON, E.C.

W. H. TAYLOR & CO., Transfer Agents, 79 Queen Street, Cheapside, E.C.

LONDON (CITY) .- Very profitable business; net income, £450 per annum; price, £1,000, or Partnership will be entertained.

MIDLANDS,-Dispensing and Light Retail; returns £1,500; net profits £450; price £800.

SUFFOLK.—Light Retail and Prescribing; returns £600; rent £40; good honse; price £300.

SURREY .- Very profitable Light Retail Dispensing and Prescribing, with good specialties; returns £800; price £650.

LINCOLNSHIRE.-Agricultural Trade; returns about £1,000 at full prices; in present hands over twenty years; rent £16 per annum; price £450; introduction given.

Other Businesses in Town and Country, particulars of which can be had on application.

BUSINESSES WANTED.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

WANTED, a Mixed Business in the country; locality no object, providing there is good scope for development; no agents need apply; to save time state full particulars at once. XYZ, care of Mr. Buckley, Chemist, Lees, near Oldham.

AT ONCE, a good London or Suburban Business, making A about £400 net; no agents; cash ready. Replies, in confidence, to J. W. Harford, care of Messrs. Swain, 200 Tulse Hill, S.W.

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A GOOD BUSINESS; must bear investigation; profits from £300 to £600. Advertiser, who possesses Major qualification and highest references, would take Partnership in good concern; cash at command. Address, W. P., care of A. Blackburn, M.P.S., Eccles, Manchester.

BUSINESSES FOR DISPOSAL.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

FOR SALE, a Light Retail Chemist's Business in a thickly-populated, good-class suburb of a Yorkshire manufacturing town; returns about £400 (including very few patent medicines); the business might be easily increased, as the present owner has not been able to devote the whole of his time to it for some years past. Apply, Hirst, Brooke & Hirst, Leeds.

AT ONCE.—Genuine Prescribing and Light Retail; improving neighbourhood; no other chemist near; large, well-fitted shop; good house; returns over £400; good prices; vendor is willing to sell to immediate purchaser for valuation stock and fixtures or reasonable offer. Address, "Chemist," care of Messrs. Lofthouse & Saltmer, Hull.

L ANCASHIRE.—Light Mixed Business; profits about a fourth of receipts; handsome, well-fitted shop, in principal street of manufacturing town, population 14,000; rent low; good opening for dentistry; to be sold cheap, proprietor entering medical profession; full investigation invited; no agents. J. Blacklock, Chemist, Haslingden

A BARGAIN. — For immediate disposal, owner having entered the medical profession, one of the best Businesses in the Rhondda Valley, and successfully carried on for 12 years; valuable colliery and medical connection to be transferred; the whole upon favourable terms. Apply, with references, Jones, Pharmaceutical Chemist, Treherbert, Glamorganshire.

CHEMIST'S SHOP-FITTINGS, BOTTLES, STOCK, &c., must be sold by November 16 (cheap). Apply, 2 Cambridge Terrace, Grange Park Road, Leyton, Essex. For view from Monday, November 8.

A GOOD-CLASS Retail, Dispensing, and Agricultural Business, with Gilbey's sole Agency attached; best position in one of the best market and manufacturing towns in the North of England; splendid opportunity for intelligent business man with capital; satisfactory reasons for disposal; must be sold; a bargain; by valuation or otherwise; about £400. Apply, Fitzroy, care of Bleasdale, Bell & Co., York.

CHEMIST'S BUSINESS, situate in a growing suburb of Leicester; general retail and dispensing; returns about £600; rent £55; good opening for Dentistry. Address, "Chemist," 20 Broadgate, Coventry.

GENUINE Dispensing and light Retail Business for immediate disposal on easy terms; good position in rapidly-growing, good-class residential district near Liverpool; good house; lease if required; this is a first-class opportunity for one with small capital. Apply to J. H. Walker, Chemist, Seacombe, Cheshire.

£500 or valuation will purchase a thriving Business in shire; returns £850; capable of considerable increase; very satisfactory reasons for disposal; introduction if required; rare chance; strict investigation. Address, "Satisfaction," care of Messrs. Hirst, Brooke & Hirst, Leeds.

FOR £70.—A Chemist's Business, established upwards of 60 years; corner shop, well-fitted, in a densely populated main thoroughfare; owner, to accept an appointment, offers the same at a great sacrifice. Address or view, 26 Sneinton Road, Nottingham.

BIRMINGHAM (Euburbs), immediately, through ill-health, an old-established Dispensing, Prescribing, and light Retail, returning £16 weekly, and capable of considerable increase; rent £45, on lease; splendid house and commanding corner premises; vendor courts fullest investigation; references given and required; price £250. "Chemist," 210, Camp Hill, Bordesley, Birmingham. N.B.—No Agents.

CHESHIRE.—A genuine light Retail Drug Business, returning over £300, at good profits; now under management, could be doubled by principal; in an increasing neighbourhood and healthy situation; excellent opening for dentistry; rent, £25; price, £250; strict investigation and inspection invited. Full particulars, apply Geo. Marshall, Chemist and Dentist, Runcorn.

RELAND, Town of Tipperary; population 6,000; first-class market town, two markets weekly.—An Apothecaries' business; established 30 years; owner relinquishing to attend to official appointments and private practice; stock and debts at valuation; business turning about £800 in cash sales alone annually; good house, central premises. Apply to John L. & W. Scallan, Solicitors, 17 Bachelors' Walk, Dublin.

NORTHUMBERLAND.—For sale, an excellent Drug Business, in the best position in a large Tyneside town; no opposition near; price nominal; rent £24; thorough investigation allowed. Particulars, &c., of "Cina," care of The Chemist and Druggist, 42 Cannon St., E.C.

EMPLOYERS WANTING ASSISTANTS.

3s, 6d. for fifty words; 6d. for every 10 words beyond.

A CTIVE, reliable Assistant wanted, where several are kept; must have had good experience, and be prepared to give first-class references; salary at first £80, outdoor. Full particulars of age, height, experience, and qualification, and enclosing carte (to be returned), to Mr. W. Dickson, 153 High Street, Southampton.

CHEMIST'S MANAGER wanted (qualified, aged, about 35, married) in East-end London; partake of profits; long reference and security required; full particulars by letter. Address, C. R. S., Messrs. Shaw, 403 Oxford Street, W.

A VACANCY occurs in a large Dispensing establishment for a thoroughly reliable Assistant; quick writer and accurate dispenser, and well recommended by last employer; abstainer preferred; hours, 9 A M. till 8 P.M. Apply, stating age, height, references, and salary required, to Butler's Medical Hall, Dublin.

LABORATORY.—Wanted, Working Chemist, qualified to undertake the preparation of ethers and fruit essences, confectionery, colours, and citrate of magnesia. Address, "Chemist," 58 Bold Street, Liverpool.

MANAGER wanted in Laboratory of Manufacturing Chemists; not over 30, and good practical analyst; must thoroughly understand manipulation of all fine chemicals, scale preparations, magnesian citrates, &c. Apply, by letter, stating age, salary required, and qualifications, to "Chemicus," care of Messrs. Dawson & Sons, 121 Cannon Street, London, E.C.

A QUALIFIED DISPENSER wanted for a large West-End establishment; hours 9 to 6.30. State age, experience, salary, &c., to "Dispenser," care of Messrs. Street & Co., 30 Cornhill, E.C. Nov. 6, 1886.7

CHEMIST and Dental Assistant, for a permanency; aged about 30; outdoors; short hours; must be well up in all branches; part time in shop and surgery—must be a good operator, and gentlemanly—remainder in workroom; good references indispensable. Heal, Chemist and Dentist, Old Market Street, Bristol.

SEASIDE.—An Assistant, Indoors, for a first-class Light Retail and Dispensing Business; must be quick and accurate Dispenser, good Prescriber, and pushing Salesman. Apply, stating age, height, salary, &c., enclosing carte, to be returned, to E. M. Smith, the Medical Hall, Weymouth.

ASSISTANTS WANTING SITUATIONS.

1s. for twelve words; 6d. for every six words beyond.

All Advertisements should reach the Office, 42 Cannon Street, by 5 p.m on Thursday afternoon, or first post on Friday morning of each week.

MIXED BUSINESS; thoroughly accustomed with routine; unqualified; aged 23. A. E. Short, 1 Rosamond Street East, Manchester.

WANTED, Junior Assistantship in London or Paris; highest references; 2 years' experience. L. H., Dr. Raverty, Bray, Ireland.

IMPROVER in Dispensing; lengthy experience in wholesale; small salary; outdoors preferred. 61/21, Office of The Chemist and Druggist, 42 Cannon Street, E.C.

JUNIOR, in Retail and Dispensing business; 4½ years' experience. G. Kidd, Stowmarket.

AS ASSISTANT in good Dispensing and Retail business; aged 22½; 8 years' experience. E. S., Corner Farm, Llisworney, Cowbridge, Glamorganshire.

AS MANAGER of Branch or Outdoor Assistant; Minor qualification; good reference A qualification; good references; state salary offered. F. Booth, Warsop Park, Mansfield.

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m A^S~JUNIOR}$; ${
m 7_{rac{1}{2}}~years'}$ experience; aged 22; good references. S. Green, Market Place, Reigate.

ABORATORY. — Twenty-five years' experience in all Pharmaceutical and Chemical preparations. Address, "Wholesale," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

A S MANAGER, Assistant, or Temporary; 13 years' experience; quick and accurate dispenser, good prescriber, and pushing salesman; Minor; steady; aged 29; height 5 ft. 9 in.; married. K., 24 Kitson Road, Camberwell, S E.

A^S ASSISTANT; outdoor; aged 35; varied experience in both Wholesale and Retail trade; good prescriber, and accustomed to manage; no objection to temporary. T. A., 66 Leven Street, Kirkdale, Liverpool.

AS MANAGER for Branch, or Assistant (time for study not objected to); in or near Liverpool, Manchester, Birmingham preferred. 87 South Street, Longsight, Man-

JUNIOR or Improver; aged 19; 3 years' London experience; excellent reference. "H. H.," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

SSISTANT; aged 21; 7 years' experience; can extract teeth. "Chemicus," Cadogan House, Whitstable.

A S JUNIOR in good house. G. Maddock, 5 Gardnor Road, Hampstead, N.W.

MPROVER; nearly 4 years' experience; aged 19; passed Prelim.; satisfactory references. M. Hey, Sherburn Lodge, South Milford.

RE-ENGAGEMENT. — Temporary or otherwise, by an energetic man; good references and practical experience; not qualified; aged 37; height 5 feet 8 inches; single. P. R. N., 12 Chapel Street, Wexbridge.

As Assistant or Manager; West-End experience; abstainer; disengaged on 29th. "Menthol," 39c North John Street, Liverpool.

JUNIOR; age 19; 3 years' experience; abstainer. J. Cornish,
Wolf's Grove Richards of the Property of the Prope Wolf's Grove, Bishopsteignton, Devon.

AS JUNIOR; first-class North country and South coast experience. G Procter, Fawcett Street, Sunderland.

MISCELLANEOUS.

Special charges are made for Advertisements under this heading, which can be obtained on application.

TO COLONIAL DRUG & CHEMICAL FIRMS.

A DVERTISER, practical and experienced, with a thorough knowledge of Home and Continental Markets, is open to Buy on Commission for a good house. Address, C. A. P. Green, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, London, E.C.

RAD. GLYCYRRH. ANG. REC.—In small or large lots; sample 12 stamps. Bratley, Chemist, Pontefract.

PRINTING CONTRACTS for Large Numbers of Letter-press Work are undertaken by William Walker & Sons, Victoria Works, Otley, Yorks; estimates given and inquiries invited; special facilities for the rapid production of Almanacs, Cheap Literature, Handbills, &c.

POXES—LIGHT WOOD BOXES.—Boxes suitable for Chemists, for sending Bottles and all kinds of articles through the Post; strong Boxes made for Packing all kinds of articles; samples post free six stamps. Write for sample, giving size you require, stating whether hinged or sliding-lid boxes are wanted, to T. Casbon, Box Maker, Millfield Works, Peterboro'.

PRELIMINARY AND MINOR.

ALL STUDENTS who are preparing should send for particulars of a method of study which will enable them to pass with ease. Enclose stamped envelope to Mr. J. Tully (Hills Prizeman), Chemist, Hastings. Established 1872. References to past and present Pupils. 32 Pupils passed the last Examinations.

Price 2s. 6d., post free.

500 PRACTICAL TRADE RECEIPTS FOR CHEMISTS AND DRUGGISTS.

4th Edition (nearly 700 Receipts). Contains approximate formulæ of several ropular Proprietary Articles, formulæ which have been devised and published in American, English, French, German, Russian, and other pharmaceutical periodicals since the last editions of more expensive works, and many private receipts of proved value which have never before been published.

GEO. H. ROBINSON, New Book Court, Crystal Palace, S.E.

TELEGRAPHIC ADDRESS: "Chemicus London."

TELEPHONE No. 1852.

EXCHANGE COLUMN.

TERMS.

Please note that all advertisements of surplus stock, second-hand books, shop fittings, Formulæ, rare or unusual proprietary articles, are accepted for the "Exchange Column," but not general announcements. Stamps are taken in payment.

Advertisements in this department must be paid for in advance. From this rule no deviation can be made. Insertions are charged the rate of \(\frac{1}{2} \)d. per word, provided the advertiser attaches his name and address, for each word of which he must also pay at the same rate; or, if he pays \(\frac{1}{2} \)d. per word, his name and address will be registered and a figure attached to his advertisement. All correspondence referring to that figure must be addressed to "The Publisher of the Chemist and Druggist, 42 Cannon Street, E.C.," and the figure must be distinctly endorsed upon the envelope. Letters will then be forwarded to their proper destination. A price is connted as one word, as e.g., \(\xi 1. 10s. 6d. \)

NOTICE.—In future no Advertisement will be inserted in this section for less than Sixpence Minimum price for any announcement, 6d.

DEPOSIT OF MONEY.—In order to ensure safety we offer the following system:—The purchaser of anything advertised in the Exchange Column may remit the amount to us. We asknowledge receipt to both parties by post eards, and only pay the money deposited on the advice of the remitter. Whether returned to him or paid to the seller, we charge a commission of 6d. on any transaction of £3 or less, or 1s. if above that amount.

Remittances payable to Edward Halse, at the G.P.O., London, and crossed Martin & Co.

FOR DISPOSAL.

NOTICE.—In future no Advertisement will be inserted in this section for less than Sixpence.

Minimum price for any announcement, 64.

Optical.

Will sell eheap or exchange five dozen spectacles and optometer, cost 41. 13s.; list sent. Rowland, Chemist, 91 Bridge Street, Manehester.

Drugs and Chemicals.

Few pounds pot. iodid. (Atkinson's), 9s. 6d. per lb., earriage paid. Chapman, Chemist, Barrow.

Nine 4s. 6d. Brown's chlorodyne, 2s. 6d.; 17 lbs. English beeswax, 1s. 3d.; 6 lbs. finest beeswax, 1s. 8d.; nine rabbit-skin chest-protectors, 1s. 3d.; six 2s. 9d. Lambert's balsam, 1s. 9d.; twelve dozen mustard-leaves, 7s.; two 1s. Fox's palatable cod-liver oil, 7s.; two 2s. ditto, 13s.; nine 1s. 1½d. Maria Zellar, 8s. 6d.; 7 lbs. potass. iodid., 9s.; 28 oz. quinine, 2s. 3d.; 9 lbs. hospital lint, 1s. Fowler, Portsea.

Proprietary Articles.

Five ewt. Myers' eattle spice, in half-cwt. bags; what offers? eash or drugs. 58/31.

What offers? Quite elean; Kill-eongh; Walker's specific; Ashton's ginger-beer preparation; extract lemon; Bird's blood pills; Foxe's castor oil; Schweitzer's eocoatina; Hartin's salt. Calcium, 27 Chorley Old Road, Bolton.

Soda-water Machinery.

For sale cheap, or exchange, a six-bottle Macdonnell's filling-machine, with all extra parts complete, for bottling adrated waters; can be seen at work at any time. Carter & Co., Soda-water Works, Bristol.

Literature.

"Fistulo in Ano," by Ashton, 2s. 6d.; Attfield's
"Chemistry," 1875, 5s.; "Operative Surgery," by Liston, 7s. (published at 22s.);
Thompson's "Dispensatory," 4s.; Hill's
"Materia Medica," 1751, 3s. 6d.; Eton Latin
Granmar, 1s. 6d. Handley, 17 George
Street, Ipswich.

Arnott's "Physies"; Squire's, 12th edition;
Oliver's "Botany"; "Year-book Pharmaey,"
1874-7; Bright's "English History," vol. 2;
White's ditto; Giles' "Translatious—Cæsar,
Virgil, Cieero;" Mason's, Cornwell's English
Grammars, Offers, Jones, Treherbert.

Shop Fittings.

Twenty ½·lb. shop-jars, as Maw's fig. 13, light blue, 8d. each; bent-glass counter-case in perfect condition (Maw's fig. A 17), about 4 feet long by 17 inches wide, 40s. J. W. Feltwell, Chemist, Hammersmith Road, W.

Formulæ.

Composition Essence Recipe.—Make your own composition essence. Pays well. The recipe, with full directions for making, dose, &e., will be sent to any address on receipt of postal order, 2s. 6d. J. W. Owen, 102 George Street, Hyde, Manchester.

Miscellaneous.

Quantity of refined wool fat for ointment bases, 1s. 6d. per lb., 7 lbs. earriage paid. Wilks, Burnley.

Marble mortar, 16 inch diameter, 10s.; tincture press, 1 gallon, 7s. 6d. Floyd, Bury St. Edmund's.

Chemist's lamp; specie jar, 24 inches, with cover; mirror window steps, each 2/. 10s.; three large earboys wanted. Vint, Hastings.

Ten or twelve gross turned wood boxes for 12 pills (Maw's), 1s. 8d. gross or offers; sample sent. Smith, Chemist, Ludlow.

Five-grain and 1-grain pill-machines, good as new, 7s. 6d. each; glass counter-case, 3 feet by 2, "Dispensing Department" over, 1l.; earriage extra if out of London. Eastman, Chemist, Tottenham.

Surplus drugs for sale or exchange, send for list; three dozen saline bottles; two small pear-shaped carboys, two straight. Lowe, Chemist, Lynn, Norfolk.

Quarter - plate tourist's maliogany camera, bellows body, rising front, reversing back, good lens, six double dark slides, well made, in thorough condition, 32s. only. Tylar, 31 Yates Street, Aston, Birmingham. To be cleared within three days.—Handsome lamp, solid lenses, Maw's fig. 6; fancy stock, assorted; Leath & Ross's homeopathic case, full of medicines; entire stock of drugs, tinctures, chemicals, scales, measures, pill machines, &c., &c.; no offers refused. Apply at once, 97 Ebury Street.

Fifty-gallon paraffin tank (Winchell's patent), with movable syphon pump and drip tin, in good condition, 2l. 10s. prompt eash, cost 5l.; pair of Avery's brass scales to weigh 56 lbs., 24-in. beam, cost 4l. 10s., will take 2l. 10s., good as new; two 3-gall, earboys, ent-glass stoppers, nearly new, 15s. M. Cuttle, Lily Terrace, Sheinton, Nottingham.

One ton Dennon, Ronx & Co.'s French earamel (burnt sugar), 14s. cwt.; quantities of black grease, 4s. ewt.; residum, 5s.; loco. grease, 12s.; one set of emery-sieves; three eases seed lac; a lot of brass paraffin lamps and chandeliers and lamp-glasses at any price; two nests of drawers, 25 and 53 drawers. B. Newham & Co., Castle Hill, Sheffield.

WANTED.

B.P., 1885. Bordass, Driffield.

Tin pure glycerine, 1·260; carriage paid. 62/35. Treatise on Dispensing. Blewett, 84 Broad

Street, Reading.
Half-drachm suppository-mould, cheap. Tunley,

Albert Road, Southsea.
Forrest's or Tupholme's petroleum measure and

pump; size and price. Wilks, Burnley. Books for Minor, latest editions. State price to

Bryan Holmes, Bentham, Laneaster. Squire's "Companion," Wills's "Minor Books,"

latest editions. 62/41.
Two-grain pill-machine, to cut 24 or 36, in good

order; also half-gallon glass percolator.
Allan, Chemist, Inverness.
Dental lathe, must be cheap and condition

Dental lathe, must be cheap and condition good; also forceps. Aspinall, Chemist, Scholes, Wigan.

Bentley's "Botany." State price and edition to Robinson, Chemist, Alfreton Road, Nottingham.

Complete copies of *The Chemist and Druggist*, October 16 and September 18, 1886, required; full price (4d.) given. Affix label on wrapper. 20/40.

Attfield's "Chemistry," latest edition; Bentley's
"Botany," latest edition; Squire's "Companion," latest edition. Knowles, Chemist,
Wallington, Surrey.

VEGETABLE BUTTER COLOURING

(OF OUR OWN MANUFACTURE).

THIS Preparation has now been before the trade upwards of five years, and is rapidly increasing in favour; it is superseding the Danish and all other makes, being quite as efficient and *much cheaper*, while it does not deposit or crust on the bottles, as is often the case with the foreign made article. It contains no Aniline, is free from the bitter taste common to most other colorants, and it has the great advantage of not colouring the Buttermilk.

To Purchasers of Bulk it affords a considerable source of profit, and is well worth the attention of Druggists in the grazing districts, many of whom are now doing a large business in it.

Price in bulk, 1/2 per lb.; 1/ in 2 gal. Bottles, less 5 per cent. discount. Special Quotations in larger quantities.

To meet the views of many of our friends, we have commenced to put this article up in bottles also, under the title and trade-mark of the "Silver Churn." It is very attractively got up, and will command a ready sale; the bottles contain more than either Danish or American, and the price to the retailer is lower than that of any other Butter Colouring in the Market.

Price in Bottles $\left\{\begin{array}{ccc} 6d., & 1/-, & 2/- & \text{Size} \\ 4/- & 8/-, & 16/- & \text{Per doz.} \end{array}\right\}$ Less 10 per cent. Discount.

Special Discount to Wholesale Houses and purchasers to the value of £5 net.

Copy of Testimonial received May 18, 1886, from Carrick's Cumberland Dairy Co. (Limited), Low Row, near Carlisle:—

"Gentlemen.—I have subjected your Silver Churn Butter Colouring to a severe trial, and have "no hesitation in saying that it is the <u>best article obtainable</u>. The absence of any objectionable taste and "smell, the beautiful straw colour imparted to the butter, and the very small quantity required for "each churning, combine to render it both efficient and economical. We find a teaspoonful sufficient for "24 quarts of cream at this season of the year.

"By continuing the manufacture of this quality, you cannot fail to secure the good opinion of "all users."

"Yours truly,

J. A. STEPHENSON,

"Manager and Dairy Expert."

In no single instance has it been known to fail, and Butter coloured with it has taken first prizes at most of the large Dairy Shows.

PROPRIETORS AND MANUFACTURERS-

OLDFIELD, PATTINSON & CO.,

WHOLESALE DRUGGISTS.

17 TODD STREET, MANCHESTER.

THE EDINBURGH COFFEE ESSENCES.

INVIGORATING, DELICIOUS, ECONOMICAL, AND CONVENIENT.

SYMINGTON'S PURE COFFEE ESSENCE.



This Essence is guaranteed to contain all the soluble constituents of COFFEE (the only addition being Pure Sugar), the GRATEFUL AROMA of the freshly roasted Beans being retained by their Special Process of manufacture.

The New 1s. Bottle makes 30 Cups of Coffee, equal to that made—in the most approved manner—direct from the finest Beans.

SYMINGTON'S PURE COFFEE ESSENCE is an almost certain cure for Nervous Headaches, etc.

A Sample Bottle will be forwarded free by Post to any Chemist on receipt of Card.

SYMINGTON'S DANDELION COFFEE ESSENCE

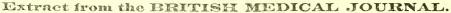
Is Specially adapted for the Dyspeptic and Bilious who cannot take ordinary Coffee.

This Beverage combines the Medicinal virtues of Taraxacum with the refreshing properties of Coffee.

The Shilling Bottle makes 25 Cups of Coffee.

Extract from the LANCET.

"The Essence of Dandelion Coffee is really an excellent substitute for coffee, and will, we think, be an advantage to many bilious and dyspeptic patients."



"Symington & Co.'s Coffee Essences have a standard reputation, and possess great merit. The Coffee Essence must be prepared in vacuo at a low temperature, as the aroma of the Coffee is well preserved; in its essential qualities it does not differ in any way from a cup of Coffee made in the ordinary way."





Forty large Cups of delicious Coffee made without trouble, for One Shilling, by using

SYMINGTON'S

ESSENCE OF COFFEE AND CHICORY

Prepared from the finest Coffee, with a suitable proportion of Chicory, which is generally preferred.

The great and increasing demand for this article warrants the assertion that it is the

COFFEE FOR THE MILLION.

THOS. SYMINGTON & CO., CHEMISTS, EDINBURGH.

LONDON OFFICE-11 CULLUM STREET, E.C.



LETCHERS'-

Permanent!

**CONCENTRATED ?:

UNIFORM!

ECONOMICAL! LIQUORS.

Any Quantity of a required Syrup at a moment's notice.

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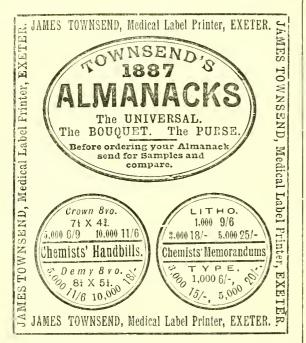
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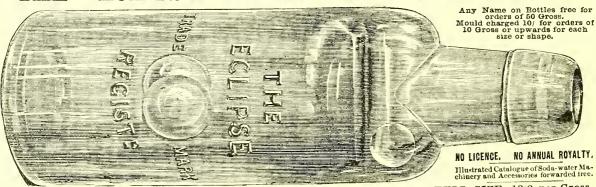
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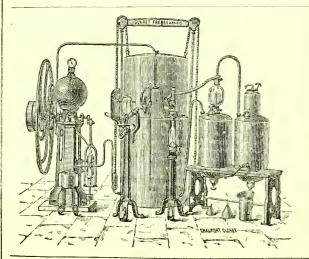
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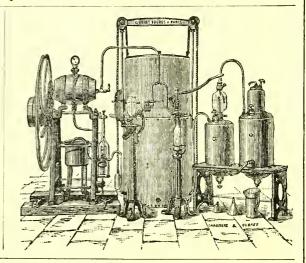
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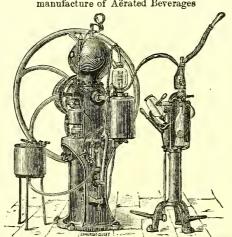
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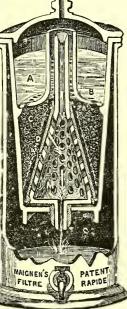
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TRADE PRICES ON APPLICATION.

to sell your own proprietaries? Yes, more than cent, per cent, if you facture them from reliable recipes. Brooks's have stood the test over six years. See his continuous advertisements; send for detailed list of 300 (free), from which are extracted the following :- Toothache Cure.-An entirely new and original remedy; gives instant ease without injury to other teeth; one trial will prove; large sale certain. Cryptzymosis.-Neverfailing remedy for gleet and all urinary discharges in either sex; may be relied on when other remedies fail. Campholyde.—An external specific for neuralgia and all rerve pains; might be called the "Magic Cnre," as it acts instantaneously; better by far than Mentbol, and quarter price. Occasional Pills (for ladies) .- The most perfect antiperiodic and emmenagogue ever sold; once taken Welch's, or other, female pills will be discarded. Stomach Corrector .- Cures indigestion, flatulence, sickness. and all stomach derangements in a few doses; pleasant taking; vastly superior to Siegel's Syrup or other nostrum. Blood Cleanser .- This, with a little judicious advertising, could be made a splendid proprietary, and would soon supplant any "puffed" remedy for the blood; pays well. Tic Specific.—The most rapid, certain, and inexpensive medicine ever offered; one dose will give relief; this has cared when Tonga and Tikheel failed. Peruvian Gout and Rheumatic Pills.-Most excellent (these sold under another name produced a fortune); they are the most perfect pill and safest ever sold. Mollispona .- Entirely new and efficacious remedy for sore and tender feet, whether arising from over-walking or profuse perspiration; softens the skin, renders it firm and pliable. Gravel Pills .- A physician's remedy of genuine worth; if any pill will cure this disease, these are guaranteed to do it. Pick-me-up.—A capital autacid and stomachic, particularly adapted to over-indulgers; cleans the palate, subdues thirst, creates appetite, and is, in fact, a positive reviver. Trixy .-New perfume, lasting, sweet, and peculiarly adapted for perfume of local name; costs under 7s. 6d. a pint. Cinchonessence. - The most perfect nerve tonic and stomach strengthener sold; resembles Solar Elixir in taste and appearance; purely vegetable; an elegant preparation. Recipes, with full instructions and all particulars, 1s. 1d. each, 3 for 2s. 6d.

SPECIAL OFFER!_The above 13 Recipes as sample, 10s.post free.

T. BROOKS, Chemist, Louth, Lincs.

12½ gals. for £1, Cask free. SPECIAL LINES FOR CASH BUYERS.

TYRER'S WORCESTER SAUCE. YORKSHIRE SAUCE. "BOROUGH" KETCHUP.

BEST VALUE THAT MONEY CAN PURCHASE.

Prices and Samples sent free of all cost by

PETER TYRER, The "Borough" Ketchup & Sauce Maker,

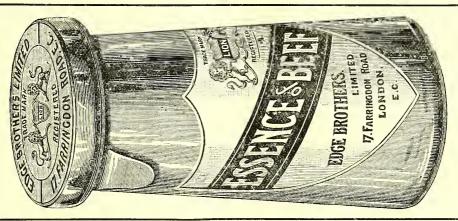
SAFE and PROFITABLE addition to a Chemist's Bus



The London Broken Tea ... 1/8 The London Two Shilling Tea... 2/-The London 2/8 Assam Tea... 2/8

For Testimonials and References see the full page Advertisement which appears monthly in this Journal. Last insertion October 23, page 9.

THE GREAT TOWER STREET TEA CO., LIMITED, LONDON.





DR. KOCHS

DIPLOME D'HONNEUR ANTWER? Assimilable and Nutritious Extract of Meat yet offered to the public. Materially Cocaper and Superior to all similar Preparations, The most

of Meat form : In pots of 31 oz ...

Sole Wholesale Depot for Great Britain_BURGOYNE, BURBIDGES & CO., 16 Coleman Street, London, E.C. Who will be glad to forward Samples, Pamphlets, &c., upon application.

DRUCGISTS' SUNDRIES DEPARTMENT.]

56 HANOVER STREET,

LIVERPOOL, OCTOBER 1st, 1886.

As the season is now approaching, we beg particularly to call attention to our Plasters as per following Lists. We guarantee the quality in all instances, and call particular attention to the Plasters on Red Felt. which last season met with a very large sale.

This season we have introduced as a novelty our Waterproof Plasters, which, being spread on a Waterproof Material, have advantages over any Plaster previously offered. They are also cheaper than the American Porous or Indiarubber Porous Plasters, and are put up in a most attractive style.

CHEST PROTECTORS we guarantee to be manufactured from the purest Lambswool purified without the aid of Chemicals and coloured with Cochineal only, and notwithstanding the advance in the price of Wool we have not advanced our quotations.

RESPIRATORS. We call attention to No. 1 as a specially good article to retail at 1/-.

EVANS, SONS & CO.

P.S.—We allow a Special Discount to buyers of Plasters in quantity.



PLASTERS



PLASTERS-MARGINAL

							Till Committee
On Leather.	Retail Price.	Balsamic.	Calefaciens.	Roborans,	No.	R-tail Price.	Belladonna, Capsicum, or Opium.
		Per Doz.	Per Doz.	Per Doz.			Per Doz.
U. ant Chang	1 2	s. d.	s. d.	s. d.			s. d.
Heart Shape	1 <i>d</i> .	0 7	0 7	0 7	_	_	_
,, ,,	$\frac{1}{2}d$.	0 11	0 11	0 11 1 3	2 3	3/1.	2 0 2 10
", ", "	27.	1 3	1 3	1 10		40.	2 10 3 9
,, ,,	31.	1 10	1 10		4	6d.	3 9
,, ,,	47.	2 6 3 9	2 6 3 9	2 6 3 9	6	84.	5 8
- **	6d.	3 9	3 9	3 9	0		3 6
Long Shape	14.	0 7	0 7	0 7	_	_	_
,, ,,	2d.	1 3	1 3	1 3	2	3d.	1 10
,, ,,	3 <i>d</i> .	1 10	1 10	1 10	3	4d.	2 10
,, ,,	41.	2 6	2 6	2 6	4	6d.	3 9
,, ,,	6d.	3 9 5 8	3 9	3 9	6	8d.	5 8
** ',	8 <i>d</i> .	5 8	5 8	5 8	8	1/-	7 6
Oval Shape	2d.	1 3	1 3	1 3			_
_	3 <i>d</i> .	1 10	1 10	1 10	2	34.	1 10
,, ,,	41.		2 6		3	4d.	2 10
,, ,,	61.	2 6 3 9	3 9	2 6 3 9	4	6d.	3 9
,, ,,	81.	5 8	5 8	5 8			_
"	_				6	87.	5 8
1, 1,	-				8	1/-	7 6
Saddle Shape	64.	3 9	3 9	3 9		81.	5 8
•	84.	5 8	5 8	5 8		1/-	7 6

Breast Shape	4d.	Emp		doz.		6d.	Belladonna j 3 9
,, ,,	6d.	Plur	nbi 3 9 -	17	-	8 <i>d</i> .	or Opium 🥇 5 8

THROAT PLASTERS, 1d.; Balsamic, 7d. per doz. THROAT PLASTERS, 2d.; Belladonna, 1/3 per doz.

Note.—We can also supply Belladonna Plaster spread to order in the following sizes, exclusive of margin, $\frac{3\frac{1}{8} \times 3\frac{1}{8}, \ 6 \times 6, \ 7\frac{1}{4} \times 7\frac{1}{4}, \ 8 \times 4}{2/- \ 6/- \ 4/- \ 6}$ inches per doz.

These sizes are frequently required in discensing.

PLASTERS-INDIA-RUBBER POROUS.

We have great pleasure in informing our friends that we have been successful in manufacturing and spreading Plasters in India-rubber combination. The quality is guaranteed, and in appearance they are quite equal to anything offering at present on the market; and we feel sure from the popularity that India-rubber Plasters have attained, and the reasonable price at which we offer them, our friends will be enabled to effect good sales. They are put up in fancy boxes, containing two dozen, and each Plaster is put in a separate envelope, which is not closed at one end, so that at pleasure the Plaster can either be sent out with simply the muslin facings on it (no name being on the Plaster itself) or with the printed envelope. The size of the Plaster is $7\frac{1}{2}$ by 5 inches. PRICES.

... 2/6 per dozen. STRENGTHENING BELLADONNA OR CAPSICUM ...

In one yard rolls, Belladonna or Capsicum, 2/6 per yard; Strengthening, 2/ per yard.

Special Discount to buyers of quantity.

Nov. 6, 1886.	T	HE CHE	MIST AND D	RUGGIST.			13	
PLASTERS, MUS'	TARD).			45	5'- per 1,000 leaves		
,, in Penny Pack FAMILY, MUSTARD, in Ti N.B.—All t	ns contai		as a substitute for	r Charta Sinapi	s.—B. Ph., 1	9/- gross 4/3 dozen 885		
PLASTERS—POROU BALSAMIC POROUS PLAS			ozan (HAWI EV'e)			2/- per dozen		
BELLADONNA ,, ,, "CHILLIE PASTE" PORO					•••	2/- per dozen 2/- ,, 2/- ,,		
STRENGTHENING "	,,		"			2/,		
PLASTERS. WA						6 4 11 7	4 .:11	
These Plasters are spread or adhere even in the bath. They a STRENGTHENING, in orna	are put u	p as follows	:			2/6 per dozen	lt WIII	
BELLADONNA , STRENGTHENING, in 1 ya	,	" "	zen, or pram boxes	,,		3/6 ,, 1/6 per yard		
BELLADONNA, ,.	•		•• ••• •••		•••	2/3 .,		
PLASTERS-FEL					71 771			
We have much pleasure in it. Plaster and Chest Protector in or wearer. The following are sizes.	ne. The and price	e y are warm es:—	, and being Poro	us are ventilati	ing, thereby	ensuring comfort	oining to the	
HEART OR LONG SHAPE			CAPSICI—Size	No. Price		3 4 6 3/9 5/8 7/6 c	ioz.	
Per dozen yards, $7\frac{1}{2}$ inche HEART SHAPE OR LONG	SHAPE,	Roborans	OR STRENGTHEN			3 4 6	-	
Per dozen yards, $7\frac{1}{2}$ inche	s wide, 1	8/		Price	1/10 2	3/9 5/8		
PLASTERS—SPREA See complete We call particular attention Alcoholic Extract, of our own management EMP. BELLADONNA, per doz PLASTERS—POROU	e List (panto to our anufacture)	Emp. Bel re, and the q Fine Shirting 18/-	uality ot which ca g. Soft Unglazed 19/-	der, which we annot be surpass Calico. Twill (25	guarantee to sed. It conta Calico. Mol	o be spread with a sp ains no artificial color	uring	
These Plasters are spread on closely, and in every way superior	Leather	specially pre	epared and perfor	ated, and are ve	entilating, m	ore pliable, adhere	more	
On Leather	No.	Retail Price	Balsamic, Calefac or Strengt	eiens, Roborans,	Retail Price.	Delladonna (lancian	ım	
Heart Shape, Fig. 1	1 2 3 4 6	$egin{array}{c} 1_2^1d. \\ 3d. \\ 4d. \\ 6d. \\ 8d. \\ \end{array}$	Р	er Doz. s. d. 0 11 1 10 2 6 3 9 5 8	$-\frac{1}{4d}$. 6d. 8d. 1/-	Per Doz. s. d. 2 6 3 9 5 8 7 6		
Long Shape, Fig. 2	1 2	$\frac{1_{\frac{1}{2}}d}{3d}$.		0 11 1 10	$\frac{1}{4d}$	2 6		
,, ,, ,,	3 4	4d. 6d.		2 6 3 9	6d. 8d.	3 9 5 8		
,, ,, ,, ,,	6	8 <i>d</i> . 1/-		5 8 7 6	1/- 1/6	7 6 11 0		
Saddle Shape, Fig. 3		8d. 1/-	Roborans or Strengthening	5 8	=			
Breast Shape Belladonna	_	8d. 1/-		5 8 Emp. 7 6 Plumbi	8 <i>d</i> .	5 8		
PLASTERS, TONIC (ON SWANSDOWN). HEART SHAPE Nos. 1 2 3 4 5 LONG SHAPE								
PLASTERS (POOR MAN'S).								



CHEST PROTECTORS.



SINGLE, DOUBLE, VEST SHAPE. AND

	No	0	1	2	3	4	5
a.	Savars Chamois Leather & Flannel,						
	single	6/-	7/-	11/6	13/6	16/-	20/- per doz.
b.	,, ,, double		20/-	26/-	32/-	39/-	48/- ,,
С.	Savars Felt, Scarlet & White assorted,	,	,	,	,	,	,
	Fig. 1 single	5/-	7/6	10/6	13/6	18/-	20/- ,,
đ.	Glass-top Boxes, containing \(\frac{1}{4} \) doz. each No. 1, 2, \(\frac{1}{3} \). & 4 Felt Chest Protectors	,	,	,	,	,	12/6 the how
	3, & 4 Felt Chest Protectors	j	•••	•••	***	•••	13/6 the box
e.	Savars Felt, Scarlet & White assorted, double	13/-	17/-	23/-	29/-	34/-	45/- per doz.
	Fig. 2, Covering	Theot	and Basi		,	•	, -
c			una Daci				
Ι.	Glass-top Boxes, containing \(\frac{1}{4}\) doz. each No. 1, 2, \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\) doz. each No. 1, 2, \(\frac{1}{2}\), \(\frac{1}{2}\)	· • • •			•••		26/- the box
.cc	5, & 4 Double Unest Protectors	N.	1 0		4		
m.	Savars "GOOD SAMARITAN," Vest-Shape, covering Chest and Back, Fig. 3	20.	1 2	3	4	5	- 6
			- 23/-	29/-	34/-	45/-	52/- per doz.
fff.	Glass-top Boxes, containing \(\frac{1}{4}\) doz. each No. 1, 2,						26/6 the box
	3, 4 "GOOD SAMARITAN" Protector			• • •	•••		LO O THE BOX







Fig. 2.



The Sizes of Savars Single Protectors are-No. $0 - 7\frac{1}{2} \times 6\frac{1}{2}$; No. $1 - 9\frac{1}{2} \times 8$; No. $2 - 10\frac{1}{2} \times 9\frac{1}{2}$; No. $3 - 12 \times 11$; No. $4 - 14 \times 12$; No. $5 - 15 \times 13\frac{1}{2}$.

The Sizes of Savars Double Protectors are-

 $10\frac{1}{3}\times 8\frac{1}{2}$

 $13\frac{1}{2} \times 10\frac{1}{3}$

Single, cover Chest only. Double, and Good Samaritan Vest cover Chest and Lungs.

The Felt Protectors are manufactured from the purest Lambswool, purified without the aid of Chemicals, and are coloured with Cochineal only.

g. Savars HARE-SKIN (English) ...

... 22/6, 25/-, and 30/- per doz.

RESPIRATORS

					RETA.	L. Per doz.	No.									R	TAIL.	Per doz
	1. Sava	rs,	Gent's	METALLIC - Cotton Velvet Pads, or	val 1/-	9/-	8.	Sava	rs, G	ent's	Open	Gold	PLATER			oval	7/-	48/-
	2. ,,		,,	SILVER WIRE GAUZE, Plated,		· ·	9.	,,	, L	adies'	Fine	,,	>>			19	7/6	50/-
				Cotton Velvet Pads	,, 2/6	18/-	10.	91		99	Open	54	,,			"	7/6	50/-
	3. ,,			SILVER PLATED, Silk Velvet Pads	,, 3/6	5 24/-	11.	"		,,	Extra	Fine	SILVER	PLATED		21	6/-	40/-
	4. "		,,	Fine SILVER PLATED WIRE			12.	,,	,	+,	Open		»» ·	,,		22	6/-	40/-
				GAUZE, Silk Velvet Pads	,, 4/-	28/-	13.	,,		,,	SILVE	R W	IRE Pla	ted, Cot	ton			
	5. ,,		99	Open Silver Plated Silk							Vε	elvet	Pads	• •		**	2/6	18/-
				Velvet Pads ,		32/-	14.	,,		,, .	Silve	R PLA	TED, Silk	Velvet P	ads	"	3/6	24/-
-	6. ,,			Extra Fine SILVER PLATED		40/-	15.	PATTIN	sox's	3 1/- C	Cork :	Respi	RATORS			,.	1/-	6/-
	7. ,,		**	Fine GOLD PLATED	,, 7/-	48/-			Ŧ	Empty	Case	s for	Respirate	ors, 4/- p	er d	oze n.		

EVANS, SONS & CO., LIVERPOOL. LONDON:

EVANS, SONS & MASON (LIMITED),

Montreal and Toronto.

EVANS, LESCHER & WEBB,

60 Bartholomew Close.

And at Manchester, Birmingham, Paris, Sydney, Victoria, and British Columbia.

SUPPLEMENT TO "THE CHEMIST AND DRUGGIST."

SATURDAY, NOV. 6, 1886.

Telephone Number, Advertisers' & Buyers' Reference List, AND INDEX TO ADVERTISEMENTS.

TELEGRAPHIC ADDRESS-CHEMICUS LONDON.

ADVERTISEMENTS APPEARING IN THIS ISSUE OF "THE CHEMIST AND DRUGGIST."

Please note that to satisfy Post Office requirements the Advertisements are paged twiceonce in Arabic, once in Roman numerals.

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Coloured Supplement
BAGE BLYTON, T. & CO.

Medicated Locenges and Chlorodyne x
BAILEY, W. H., & CO.

BERNETT & FONTER

BATTLE & CO.

BERNETT & FONTER

BATTLE & CO.

BERNETT & FONTER

BERNTON, CLARKE & CO.

BIRKBECK BANK Bank and Building Society 5
BLAKE & MACKENIE.

BIRKBECK BANK Bank and Building Society 5
BLAKE & MACKENIE.

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BURROUGH, JAMES.

BURROUGH, JAMES.

BURROUGHS, WELLCOME & CO.

BURROUGHS, WELLCOME & CO.

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Coloured Supplement

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COLEMAN & CO.

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Pharmaceutical Cremicals and Camphor Tablets, Mercurials, Ethers, Bismuth, Soda Carb. Cover MAY, ROBERTS & CO. Feeding Battles vi Water Baths MAY, ROBERTS & CO. Mater Baths

METCALF, THEODORE, & CO. Water Baths

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MILNE, SONS & MACFIE

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ROBINSON, B. Concentrated Water 1v

ROBINSON, Concentrated Water 1v

ROBINSON, B. Concentrated Water 1v

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SANFORD & SONS

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WOODS M. W. CO. ...Morphia and all J. San is XIII
WOODS M. W. WINEY
WRIGHT, LAYULAY & UNNEY
Wholerale and Export Druggists COVER

CLASSIFIED LIST OF ALL ADVERTISERS

Whose Announcements appear in "THE CHEMIST AND DRUGGIST." Those whose Names do not appear above are published in one of the other issues of this month.

AERATED AND MINERAL WTS

MINERAL WTS
Esculap
Apollinaris (Hunyadi, Friedrichshall, and Apollinaris)
Barnett and Foster
Chemists' Aërated
Association
Durrant, Geo. & Co.
Ellis (Ruthin'
Gallais, E. (Min.)
Geraut and Co.
Hassall and Co. (Citrle Acid,
Phoenho'

Hassail and Co. (Citric Acid, Phoenho.' Phoenho.' Hay, W. (Hop Ale Essence) Hunyadi Janos Idris and Co. Ingram and Royle (Mineral and Vichy) Sauerbrunnen Jewsbury and Brown Kimmond Meadowcroft, W. Monserto. (Borne) Monserto. (Borne) Honserto. (Bo

[See GINGER ALE.]

ACETIC ACID

Dunn and Co. Hirst, Brooke and Hirst Lindsey and Co Morris and Callard (Salts)

DITTO PLANT

(See SYPHONS and ESEENOES.]
Barnet and Foster
Bratby and Hinchliffe
Bush, W. J., and Co.
Froducer. &c.)
Favarger, H.
Gueret Frères
Meadowcroft. W.
Tyler, Hayward, and Co.
Vallet. L. (Bottles)
[See SYPHONS.]

LEALOIDE

Wolters, Otto
Wolters, Otto
Wolters, Otto

AGENCIES

ABROAD

Eisner and Mena
delphia!
Evans, Sons and
(Canada)
Felton (Melbourn
Fougera (New Yo

ALKALOIDS Howards and Sons (Cinchona) Smith, T. and H. AMMONIA

May and Baker ANALYSTS

Corbyn, Stacey and Co. Follows and Bate Knowles, J. (Balances) Maud, W. R.

May, Roberts (Water-bath)
Orme (Scientific)
Perken, Son and Rayment
(Scientific)
Rothermel, Psul (Vinerar)
Rothermel, Psul (Vinerar)
Synton, Francis (Analytical)
Wolters, Otto

ABROAD

Cocking (Japan)
Drysdale, J. W., and Co.
Eisner and Menaclson (Philadelphia)
Evans, Sons and Mason
(Canada)
Felton (Melbourne)
Fougera (New York)
Hormusjee Ruttonjee(Bmby)
Kempthorne (Nw. Zealand)
Lennon (Port Elizabeth)
MacNaughtan (New York)
Mayhew, E. (Wstn. Australia)
Phillips and Co. (Bombay)
Prosser, E., and Co. (Sdmy)
Roberts (Faris, &c.)
Rocke (Melbourne)
Shariand & Co. (AucklandN, Z.)
Shariand & Co. (AucklandN, Z.)
Shariend & Co. (AucklandN, Z.)
Stallman and Pulcon
bymes and Co. (Simls)

Bowers Bros. Ford, Shapland and Co. Kay Bros. Silverlock, H. Townsend, J.

BANK Birkbeck Bank BATHS

May Roberts (Water)
BEESWX & HONEY Bowdlear and Co. Kemp, W., and Sor Woolley, Sons and Co.

BENZENE, &c. Brunner, Mond and Co. Sanger and Sons BICARB. SODA

Brunner, Mond and Co. Gaskett, Deacon and Co. Howards & Sons May and Baker BISMUTH PREP.

Hewlett and Sons Howards and Sons Msy and Baker Sellers, J.

BLACKING

New Military Blacking Com-pany Jamieson Bros.

BOOKS

Coffin's, Dr.
Dohell, Dr. (Bournemouth)
Tully, J.
Whitla, W., M.D.
BOTANIC BEER

Newball and Mason BOTTLE CAPS

Hunt, W. F., and Co.

BOTTLES

Branett and Foster
Brathy and Hinchlife
Brooks, Peel (Perlumers)
Glasgow A pothecaries' Co.
Hearn, Riddle and Co.
Isaacs and Co.
Kilner Bros.
Lang, Jonas and Jules
Lynch and Co. ("L." Brand)
Morrison, R., and Co.
Poths

Poths
Thompson, Millard and Co
(Feeding)

BOXES

Aushn and Co. (Cardboar 1) Aviton and Sainders (Willow) Brehmer, Aug. (Cardboard Folding) Metz, Paul (Pine and Willow) Robinson and Sonsi Cardboard) Bogers, J., and Co. (Grease Proof) Proof) Self-Opening Tin Box Co.

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Battle and Co.

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Flesh)
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Newbery and Sous
Sutton, O. S. (Tooth Brush)

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Bush. W., and Son (Mari-goldine) Meyer and Henckel Oldfield, Pattinson and Co.

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May and Baker Murray, Sir James (Fluid) CAPSULES

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Allen and Hanburys

CENTERY Foulkes Kay (Coaguline)

CHALK PRECIP.

Dunn and Co. Levermore and Co.

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Berustein Vozt (Fine)
Bramwell, E., and son
Brunner, Mond and Co.
Bush, W., and Co.
Dunn and Co.
Fletcher, Fletcher & Stevenson
Gaskell, Deacon and Go. Bitcarbouate of Soda)
Howards and Sons (Pharmaceutical)
Lindsey, C. R., and Co.
May and Baker
Morris, Callard and Co.
Smith, T. and H.
Typke and King
Walker, Froke and Co.
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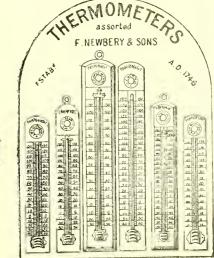
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EDWARD B. LANSING, President. DAVID R. DOTY, Secretary.

99

LEADING PROPRIETARIES:

POMEROY'S PETROLINE POROUSED PLASTERS, packed in Envelopes "Pedacura" Combination Corn Cure Plaster Tins. "Pedacura" Insole Medicated Pad Plaster 12 Peleg White's All Healing Ointment Peleg White's Original Sticking Salve Cases. SPECIALITIES: Arnold's Extra Belladonna Plasters Envelopes Arnold's Compound Capsicum Plasters 99 Arnold's Family Blister Plasters Arnold's Ready Adhesive Plasters 99

MAY, ROBERTS & CO.,

ROAD, LONDON, E.C. CLERKENWELL 9

DDRESS-"FEEDING BOTTLES LONDON."

CATALOGUE OF DRUGGISTS' SUNDRIES AND PATENT MEDICINES OF PRINT AT PRESENT. OUT

CARRIAGE ON SUNDRIES. -Since 1877 we have allowed 5 per cent. discount on orders for £5 worth of "Sundries" in lieu of Carriage. By this arrangement our Friends are enabled to have enclosures sent with our goods, which they were unable to do when we paid Carriage.

NO TRAVELLERS EMPLOYED - BUYERS ARE THEREFORE SPARED THEIR EXPENSES COMPARE OUR PRICES.

FEEDING BOTTLES. REDUCED PRICES FOR



"Sandringham." Earthenware Tops.



" Sandringham." Metal Screw Caps.



"Sandringham." Screw Glass Stoppers.



"Colonial." Earthenware or Wood Tops.

Earthenware Tops—	111	,
With White Fittings, each in	s.	đ,
box, two brushes per doz.	6	0
With Black Fittings, each in		
box, two brushes per doz. Spare White Fittings ,,	6	6
Spare White Fittings ,,	3	4
Spare Black Fittings "	3	10
Spare Bottles ,,	1	9
Sandringham (1s.) - W	ЙΗΙ	TE,
Screw Glass Stoppers— With White Fittings, each in		
With White Fittings, each in	8.	d.
box, two brushes per doz.	6	0
With Black Fittings, each in		
box, two brushespcr doz. Spare White Fittings ,, Spare Black Fittings ,,	6	6
Spare White Fittings ,,	3	4
Spare Black Fittings "	3	10
Spare Bottles ,,	2	0
andringham (1s.) - W	HI.	ΓE,
Screw Metal Caps, Nickel pla	ted	
With White Fittings, each in	s.	d.
box, two brushes per toz. With Black Fittings, each in	7	0
box two brushes per des	7	6
Space White Fittings	4	0
Spare Black Fittings ,,	4	6
box. two brushes per doz. Sparc White Fittings Spare Black Fittings Spare Bottles ,,	2	0
Spare Bottles ,,		
Sandring ham (2s.) — W Gilt Porcelain Tops —	HI.	ГШ,
With Black Fittings and Spare		
Glass Tube, Shield and Teat,		
each in box, two brushes	8.	đ.
per doz.	11	6
Spare Black Fittings ,,	5	6
Spare Bottles ,,	2	0
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"Popular." Screw Glass Stoppers.



" Popular." Earthenware or Wood Tops.



"Colonial." Screw Glass Stopper.

1 9 1 9

Spare Bottles

Popular (6d.)—Green		Box	wood
or Earthenware Tops-			
	-		_

With White Fittings, each in	8.	d.
boxper doz.	2	10
With Black Fittings, each in		
boxper doz.	3	1
With White Fittings, 1 dozen		
in boxper doz.	2	4
With Black Fittings, 1 dozen		
in boxper doz.	2	7
If with White instead of Green		
Bottles per doz. 2d.	ext	ra
Spare White Fittings per doz.	1	4
Spare Black Fittings ,,	1	7
Spare Green Bottles ,,	1	0
Spare White Bottles ,,	1	2
•		

Popular (6d.) - GREEN, Screw Glass Stoppers -

With White Fittings, each in	8.	d
boxper doz.	3	6
With Black Fittings, each in		
boxper doz.	3	9
With White Fittings, 1 dozen		
in boxper doz.	3	0
With Black Fittings, 1 dozen		
in box per doz	3	3
Spare White Fittings ,,	1	6
Spare Black Fittings ,,	1	9
Spare Bottles ,,	1	9

Popular (1s.)-WHITE, Earthen-

ware rops		
With White Fittings, each in	5.	d.
box, two brushes per doz.	4	6
With Black Fittings, each in		
box, two brushesper doz.	5	0
Spare White Fittings "	2	6
Spare Black Fittings ,,	3	0
Spare Bottles ,,	1	2

Popular (1s.) - WHITE, Screw

Grass Estoppers-		
With White Fittings, each in	5.	d.
box, two brushes., per doz.	4	6
With Black Fittings, each in		
box, two brushesper doz.	5	0
Spare White Fittings ,,	2	6
Spare Black Fittings ,,	3	0
Spare Bottles "	1	9

Colonial (1s)-WHITE, Earthen-

ware rops-		
With White Fittings, each in	8.	d.
box, two brushes. per doz.	4	6
With Black Fittings, each in		
box, two brushesper doz.	5	0
Spare White Fittings ,,	2	6
Spare Black Fittings ,,	3	0
Spare Bottles	1	2
Epazo = ottico iiiiiii ()	-	_

Colonial (1s.) - WHITE, Screw Glass Stoppers

With White Fittings, each in box, two brushes. per doz.	8. 4	
With Black Fittings, each in box, two brushes. per doz.	5	0
Spare White Fittings ,, Spare Black Fittings ,,	2 3	6
Spare Bottles	1	0

Burroughs, Wellcome & Co.'s Advertisement.]

Peptonising Foods

FOR INFANTS AND INVALIDS MADE EASY.

ZYMINE.

In the treatment of acute disease, and in the wasting diseases of infants, how often are all "let and hindrance" to be found in the "processes preliminary to assimilation and nutrition," i.e., in the digestion? Under such circumstances Zymine (Extractum Pancreatis) affords certain advantages which cannot be over-estimated. It enables the physician to prepare a thoroughly scientific beef-tea. This is vital. "Beeftea or its analogues, the various solutions, most of the extracts, and the expressed juice of meat, are a delusion and a snare" (Flint). "Furthermore, it is to be considered that water and pressure not only fail to extract the alimentary principles from meat, but the excrementitious principles, or the products of destructive assimilation, are thereby extracted; hence, not very inaptly beef-tea has been compared to urine" (Ibid). Zymine overcomes the difficulty, for it dissolves the coagulated proteid matter otherwise found in the residue rejected.

Food has been known to remain in the stomach for forty-eight hours (Bauer), and who can estimate the damage (possibly often irreparable) done under such conditions? It is not improbable that the greatest likelihood of such a mishap is from gruels, for the stomach has no power over starch, and in disease the digestive activity of the saliva is greatly impaired. It is very easy to understand, therefore, how gruels, if undigested, may do incalculable damage, as, for example, in fevers. The diastase in Zymine removes all danger at once.

TO PREPARE BEEF-TEA.

Take quarter pound minced beef and half pint of water. Slowly raise to a boil. Pour off the liquor, rub the meat to a paste, and put both into a jar with half pint more water. Add Zymine 30 grains, and Sodium Bicarbonate 20 grains.

Set in water as hot as the hand can bear for three hours; then

TO PREPARE NUTRIENT ENEMATAS.*

In peptonising nutrient enematas, the usual process of peptonisation should be followed, using milk with or without beeftea, eggs, or gruel.

After referring to Zymine (Extractum Pancreatis), the British Medical Journal says:—"It has proved useful in many hands in uræmic vomiting gastric catarrh, pernicious anæmia, gastric ulcer, and pyloric and intestinal obstruction."

PEPTONISING POWDERS (FAIRCHILD).

Most infant "foods" are in great part derived from cereals, and to suppose that their starch is all converted in preparing them is a great mistake. Liebig attributed half the rate of infant mortality to farinaceous foods. The glucose found in condensed milk needs no comment,† and the dangers of rickets have been referred to by Pavy, Lusk, and others. Though infants grow plump and appear to thrive upon condensed milk, it is alleged that the appearance is delusive (Pavy). "The perfect solution of the present problem," writes Professor Albert Leeds, one of the greatest authorities on milks, "is to be found in the modification of cows' milk by chemical processes, so as to make it physiologically equivalent to human milk." Such a modification is precisely what the Peptonising Powders (Fairchild) bring about. Adding water in no way surmounts the difficulty, and aptly does Dr. Eustace Smith say of milk which has been simply diluted, that "the process does nothing to make the stiff curd more digestible, and the firm clotting of the casein is just the difficulty which it is so essential to overcome."

TO PEPTONISE MILK FOR INFANTS FRESH FOR EACH TIME OF USING.

Put a quarter Peptonising Powder (Fairchild) into a quarter pint of water with a quarter pint of milk; keep warm for twenty minutes, sweeten and administer.

In cows' milk peptonised with Fairchild's Pep tonising Powders the casein is made soluble, and can no longer do mischief. It flakes on adding acid like mothers' milk. It presents all the nutrient ingredients --oil, globules, sugar of milk, and casein-ready for immediate absorption. It approximates mothers milk more closely than anything hitherto discovered. It is without exception the only preparation fit for feeding young infants artificially, and children seem to thrive on it as readily as on mothers' milk. In all diseases where milk and skim milk are prescribed, it has been found to possess superior advantages. It far surpasses any fermented milk (Koumiss), for in the process of fermentation the casein is not digested at all. It is a bland, assimilable, nutritious fluid, and "in the present state of our knowledge we can recommend no better substitute for human milk than peptonised cows' milk " (J. Lewis Smith). Dr. J. L. Ludlow says:—"I believe the life of one of my little ones was saved by it."

BURROUGHS, WELLCOME & Co.

Snow Hill Buildings, London, E.C.

^{*} The Zyminised Suppositories are composed of pentonised beef, and weigh upwards of 100 grains. Life may be sustained with them for weeks.

^{† &}quot;It is now a recognised fact that hand-fed babies are liable to scurve, and if the child be entirely deprived of fresh milk and other anti-scorbutic foods, this consequence of injudicious feeding is very likely to be brought about." (Eustace Smith).

66 CO A TENNE

COMPRESSED CHLORATE POTASH, CHLORIDE AMMONIA, SODA MINT, CHLORATE POTASH & BORAX, & OTHER DRUGS.

Several years since we introduced these to the drug trade and medical profession, sine; which time we have at great expense advertised them in various ways, the result being their approval by all who have become familiar with them, with a consequent large demand and sale. We have not only maintained the original standard of quality, but have constantly improved them, so that they are now pronounced by experts to be perfect in their way, and greatly superior as pharmaceutical products to the many imitations which have since been offered at lower prices. We have from the first sold at as low a price as was consistent with our expanditure an unufacture and advertising, and we believe that not only has the business upon these products been fairly earned by us, but that it is to the interest of the drug trade to sell them only, rather than to supply the imitation goods. Our present reduced rates upon these goods offer a good margin to the retailer, each shilling package paying a uet profit of, say, 5d. If the inferior goods cost the dealer nothing they would pay no better profit at the prices they bring. The profession and public are familiar with our goods, and willingly pay a shilling for 25 or 40 elegantly compressed powders. It is therefore, seen that our products are the most profitable, and will be found the most satisfactory by the Trale, Profession, and Public.

Samples and circulars of our new Voice Tabloids of Coeaine, with Chlorate of Potash and Borax, will be supplied for distribution to

BURROUGHS, WELLCOME & CO., Manufacturing Chemists, Snow Hill Buildings, LONDON, E.C.

BENTON, CLARKE & CO., DRUG AND SPICE MERCHANTS.

16 Philpot Lane, London, E.C.,

IMPORTERS AND DEALERS IN ORIGINAL PACKAGES DRUGS AND SPICES.

Are prepared to receive Consignments from Abroad, or Supply the Home and Export Trade at Market Prices.

These Articles bear a good profit and will pay to push. We have 27 patterns. The neatest and BEST of any in the market. We are actual Makers, and can produce any special kind in any colour at very short notice.

Retail Prices ... 1/ 1/6 2/ 2/6 3/ $3/6 \cdot 4/$ 5/ 6/ 10/6 Wholesale, per doz. ... 8/ 12/ 16/ 18/ 21/ 24/ 28/ 30/ 36/ 48/

Counter Cases containing assortments of the leading Patterns, as follows:-

No. 1 Case. Two each of Nos. 1, 2, 3, 4. One ,, 5, 8, 10, 12, 14, 15, 17, 18, 20, 21, 22. Producing retail Cost £2 6 8 Less 10 per cent. ... 0 4 8

. . .

Showing a Profit of ...

Producing retail £5 18 °0 Less 10 per cent....

Six each of Nos. 1, 2, 3, 4.

One "

Showing a Profit of ...

0 11 10

£10 18 6

5 6 4

No. 2 Case.

Two ,, ,, 5, 6, 8, 10, 12, 17, 18, 21, 22. One ,, ,, 7, 9, 11, 13, 14, 15, 16, 20, 23, 25.

With orders amounting to £2 net we will send a Mahogany Glass-top Counter Case, with hinged lid, FREE OF CHARGE; and with orders amounting to £5 net a hundsome Muhogany Counter Case (size 22×12×4), with sloping top, hinged back, and sluting tray.

... £2 3 6

DESCRIPTIVE LIST WILL BE FORWARDED ON APPLICATION,

BOURNE, JOHNSON & LATIMER, WHOLESALE AND EXPORT DRUGGISTS' SUNDRIESMEN, 34 and 35 FURNIVAL STREET, LONDON, E.C.



ESTABLISHED 1859.

PRINCIPAL OFFICE, 42 CANNON STREET, LONDON, E.C. BRANCH OFFICES:

MORMANBY CHAMBERS, MELBOURNE,

AND

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ADVERTISEMENTS of employers and assistants can now be received by us up to the first post on Friday mornings, and will be inserted in the current week's issue.

CORRESPONDENTS will please note that our registered telegraphic address is changed from "Chemdrug, London," to "Chemicus, London," the Post-office authorities having informed us that they found the former word inconvenient.

THE RESULTS of the pharmaceutical examinations which were held last month will be found on another page. Eighteen candidates were examined in the "Major," 12 being successful, while of 196 Minor candidates only 78, or barely 42 per cent., passed.

READING CASES.—Please note: We cannot continue to deliver these to City houses for enclosure. We find so many of the wholesale firms careless about enclosures, and this leads to so much troublesome correspondence and double work, that we have decided to supply these reading cases only to purchasers in the office at 1s., or by parcels post at 1s. 3d.

POST-CARD COMPETITION, No. 8.—We have in the past two weeks stated the conditions of this competition. We invite subscribers or their assistants to send us, on post-cards or otherwise, particulars of chemical experiments the materials for which can be suitably packed for sale. This competition is open till November 30. Prizes to the amount of five guineas are offered if the competition should be lively enough.

THE SHOP HOURS BILL.—We have printed the text of this Bill for the convenience of associations who may wish to discuss it during the winter.

NEW QUININE TEST.—At the meeting of the Paris Pharmaceutical Society on Wednesday, Dr. de Vrij described a new test for quinine which he had devised, and which will be found described in our Paris correspondent's letter.

OUR ELABORATE TABLE of extra-official corrections of the British Pharmacopæia, which looked so formidable last week, has been seriously damaged by the destructive distillation to which Professor Attfield has subjected it in a letter which is published in our correspondence section.

MEDICAL EDUCATION in London is not flourishing. The entrics for the full curriculum at the eleven metropolitan medical schools this year number only 623, a lower figure than last year. In 1881 the number was 732. It is felt that a degree conferring the title "doctor" would retrieve the waning popularity of the schools. Why should not the London University open its doors a little wider?

THE CHEMISTS AND DRUGGISTS' DIARY FOR 1837 has been printed during the past week. As an encouragement to imitators we may mention that the production of this work required the employment of over $2\frac{1}{4}$ tons of type, and occupied 17 printing machines. The Australian edition will be sent to our Melbourne office for distribution by the Austral, leaving London next week, but the home edition will not be ready for circulation till the latter part of the month.

THE Pharmaceutical Council meeting on Wednesday was a very long one, and the deliberations were finished in lamplight and with half a dozen empty chairs round the oval table. After the pleasantries and trivialities of the earlier part of the proceedings the Council discussed, for the last time it was hoped, their relations with the Scotch members, and the latter have the credit of gaining three of the four points for which they have fought so long, and all that now remains to be done in order that the Society's affairs may go on prosperously in Scotland is to reawaken the interest in the Society. if that be possible. The tone of the discussion was very temperate, Mr. Schacht standing out prominently in opposition to settlement. To examination candidates who have the misfortune to fail, an important concession was made; they will henceforth be informed, before they leave the examination room, of the result of their efforts, and preliminary candidates will get similar information from the secretary. The only other subject of importance discussed at the meeting took place in an attempt to resuscitate the curriculum scheme. This matter is referred to on another page.

DIARY FOR NEXT WEEK.

Tuesday, November 9.

Public sales of drysalteries, at the Commercial Sale Rooms, Mincing Lane, at 1 P.M.

Wednesday, November 10.

Public sales of spices, at the Commercial Sale Rooms, Mincing Lane, at noon.

Royal Microscopical Society, King's College, W.C., at 8 P.M. Mr. S. O. Ridley on "Classification and Spiculation of the Management Spanners of the Challenger"

Monaxoned Sponges of the *Challenger*."

Mr. A. Dendy on "Anatomy and Physiology of the Monaxonid Sponges of the *Challenger*."

Dr. Crookshank on the "Sara Parasite."

Thursday, November 11.

Public sales of drugs, at the New Corn Exchange, Mark Lane, E.C., at 10.30 A.M.

Chemists' Assistants' Association, 103 Great Russell Street, W.C. Musical and Social, at 9 P.M.

BRITISH PHARMACEUTICAL CONFERENCE.

A MEETING of the Executive Committee was held at 17 Bloomsbury Square on Wednesday, October 27, at 4 P.M.

Present: Professor Attfield (in the chair), Messrs. Carteighe, Davies, Gerrard, Plowman, Symons, and Dr. Thresh and Mr. Naylor (Hon. Gen. Secs.).

The minutes of the previous meeting were read and confirmed. Letters regretting inability to attend were read from the President (Mr. Atkins), Messrs. Dott, Groves, Maben, and Stephenson.

Mr. Naylor informed the meeting that their paid officer had accepted an engagement as dispenser on board a steamer for Australia, a circumstance which had forced upon him an abrupt termination of his duties as Secretary.

Mr. Plowman, from professional knowledge, explained that the condition of the health of Mr. Princep was such as to render it in the last degree advisable that he should embrace

the earliest opportunity of taking a sca-voyage.

The appointment of a Secretary to the Conference was then considered. The Hon. Gen. Sees. announced that they had received four applications. The Chairman remarked that in selecting a new officer two courses were open to them: either to proceed on the lines on which Mr. Princep was appointed, or to return to the practice in vogue prior to 1880 and appoint an Assistant Secretary. He believed now as then there were gentlemen who, in the interests of pharmacy, would be proud to serve in the capacity of Assistant Secretary to the Conference, and who would regard the small salary they received, not as remuneration, but as an honorarium. It was intimated that two of the applicants had expressed their willingness to accept the post in harmony with these conditions. A general discussion ensued affirming this general principle, after which it was moved by Mr. Plowman, and seconded by Dr. Thresh—

That an Assistant Secretary be appointed for one year at a salary of 40% per annum; that he be required to attend the annual meeting; and that his expenses at the annual meeting be allowed, the sum not to exceed 10%.

It was proposed by Mr. Naylor, and seconded by Mr. Davies—

That Mr. W. H. Ince be appointed Assistant Secretary to the Conference on the terms agreed upon.

The resolutions were successively put, and carried unanimously.

In answer to an inquiry from Mr. David Hooper, Secretary for Madras, relative to the subscription for membership of the Conference, it was decided that the amount of native coin remitted must be equivalent to 9s. 6d.

METHYL-ETHYL ETHER.*

BY DR. B. W. RICHARDSON, F.R.S.

IN 1849 Professor Williamson discovered an ether to which he gave the name of Methyl-ethyl Ether. It is a definite chemical compound composed of C₃H₄O, and it is made from methylate of sodium by treating that methylate with iodide of ethyl. In the decomposition which ensues iodide of sodium is produced with the Methyl-ethyl Ether: the ether is distilled over into a reservoir surrounded by crushed ice or iced water.

Methyl-ethyl Ether is a fluid boiling at 52° Fahr., and having a vapour density of 25°, taking hydrogen as unity. It is more soluble in water than sulphuric ether, water at a temperature of 40° Fahr. taking up one-fourth of its owr volume.

In turning over some notes of experiments which I conducted in 1866-7, I found amongst several other unpublished and forgotten records the subjoined, relating to methyl-ethyl ether.

Methyl-ethyl ether is very pleasant to breathe as a vapour,

and the aqueous solution of it forms one of the most agreeable ethereal solutions of all the ether series. It could easily be used from an iron bottle in which it has been compressed by cold.

Two fluid drachms of the ether, diffused at 50° Fahr. in 1,000 cubic inches of air produce a narcotic atmosphere, but the vapour may be inhaled with air with comparative ease and safety, without any dilution; indeed, in order to make it take rapid effect, it cannot be pushed too rapidly. The peculiarities of its action are that it tends to induce a condition resembling asphyxia, leading to a prolonged sleep. A pigeon, narcotised with the gas, remained, without further administration, insensible in common air. at 60° Fahr., for Rabbits were equally influenced. In the five minutes. human subject the inhalation required to be prolonged for a period of three minutes before a decided influence was induced; then the effect continued for from four to five minutes, with sudden awakening, in the same way as from the sleep induced by methylic ether. Like all the ethers, methyl-ethyl ether causes paralysis of the pulmonary vessels; the danger from which is, however, not immediate, for the heart remains in good action when respiration has actually stopped under the inhalation of the vapour. Thus, after three minutes' cessation of respiration, there was good recovery, while artificial respiration sufficed within that period to restore, immediately, the independent life.

Altogether this ether is so safe and pleasant in effect, and so effective in action, that it might be brought into extended use. It occasionally causes vomiting, but not of a severe character, and the asphyxia it induces is more alarming in appearance than in fact. The veins of the neck fill and pulsate with the movements of breathing, but the danger is slight, if any, until after an administration so prolonged as to lead to exudation of fluid into the bronchial passages and to arrest of the circulation through the pulmonary circuit.



PARTNERSHIPS DISSOLVED.

Cox, J., & Co., Sherborne Lanc, City, gum and colour merchants.

JACKSON & HEWITT, Manchester, manufacturing chemists.

Maples Bros., Sheffield, drysalters and blue manufacturers. As far as regards C. Maples, jun.

FIRST MEETING.

Large, Charles William, Cornwall Road, Notting Hill, dentist. Nov. 5 33 Carey Street, Lincoln's Inn. Nov. 18, 34 Lincoln's Inn Fields.

RECEIVING ORDER AND DATE OF PUBLIC EXAMINATION.

WHITWELL, FRANCIS WILLIAM, Thirsk, druggist.

ADJUDICATIONS.

Ferguson, William Kennedy, and Wetherell, Thomas Wilkinson, Leeds, chemists and druggists and electroplaters.

THOMAS, BENJAMIN, Llanstephan, Carmarthenshire, chemist and druggist, wine merchant, and general dealer.

WHITWELL, FRANCIS WILLIAM, Thirsk, druggist.

NOTICES OF DIVIDENDS.

EARP. JOSEPH GUEST. Birmingham, oil and colour merchant. First and final div. of 1s. 3\frac{3}{4}d. Nov. 1. Official Receiver's Offices, Birmingham.

Salmon, Thomas, Denbigh, chemist and druggist. Second and final div. of 7d. Nov. 10. Official Receiver's Offices, Chester.

HIS MEDICINE WAS INVINCIBLE. — Family physician meets patron on the street "Ah, good morning, Mr. Simpson! How is vour good wife to-day?" "She's ever so much better, sir; a little restless the fore part of the night, but very quiet afterwards." "Yes. yes; that's encouraging. Mv new preparation is sweeping all before it. Don't vou think so, Mr. Simpson?" "I know it, sir. By-the-by, Dr. Dosem, the funeral is appointed for to-morrow afternoon. May I expect you to be present

Metropolitan Reports.

THE HOLLOWAY MYSTERY.—The mystery attending the sudden death of Mr. Henry Hart, who, as previously reported, expired in the house of Mr. Edwin Stovell, a chemist, of 174 Hornsey Road, Holloway, on the morning of October 12, under circumstances which led the coroner's jury last week to return an open verdict, has been solved. On Friday last Mrs. Stovell noticed among a packet of papers belonging to the deceased a letter, in which he intimated his intention of committing suicide. The letter was identified as the writing of Mr. Hart. At an inquest held on Saturday, the coroner (Dr. Danford Thomas) read it to the jury, in order that as much publicity as possible should be given to the revelation.

Probincial Reports.

Items of news, and newspapers containing matters of intesest to the trade, sent to the Editor, will much oblige.

BIRMINGHAM.

On Saturday, October 30, the formal closing of the Birmingham Exhibition of local industries took place. The Exhibition was opened on August 26, and has been visited by 350,000 persons, besides 30,000 school children, which were admitted free. A profit of 5,500% has been realised.

QUEEN'S COLLEGE.—There have recently been some changes in the materia medica department of this college, principally in reference to the museum, which is now arranged in a handsome apartment, and has been considerably amplified. A laboratory for pharmacological research has also been fitted up.

BOURNEMOUTH.

Mr. W. Gilbert, homocopathic and dispensing chemist, of Commercial Road, Bournemouth, has opened a branch establishment at Lansdowne, in the same town.

MR. GEORGE TAYLOR, of the Westbourne Pharmacy, near Bournemouth, has just completed some extensive alterations and additions to his establishment, making it one of the handsomest shops in the district.

It is rumoured that the peace and tranquillity of the trade of this place are to be disturbed by a new arrival in the form of a branch from a neighbouring town; but the difficulty appears to be to secure a suitable shop at a moderate rental, the rents and taxes being extremely heavy in this town.

Mr. J. Shemmonds, chemist, of Old Christchurch Road, Bournemouth, is about to open a branch at the neighbouring suburb of Winton.

BURY ST. EDMUND'S.

SMASHING A CHEMIST'S WINDOW.—On Saturday morning a frightened horse, harnessed to a trap, was running down the street, having thrown its driver from the vehicle; several persons endeavoured to stop the animal, which, turning suddenly round, dashed its head through a large plate-glass window at Mr. Hardwicke's, chemist; but during the temporary check received at the window, it was seized and secured.

MANCHESTER.

MANCHESTER PP 'RMACY STUDENTS' ASSOCIATION.—The first meeting of this Association this session took place in the Pharmaceutical Laboratory of the Owens College on October 28.

The President, Mr. W. Elborne, gave an address dealing with

the subject of original research in Great Britain, regretting that British pharmacists were far behind their continental confrieres in this respect. Afterwards the reporters on pharmacy and botany, Mr. J. C. Husband, F.C.S., and Mr. W. Turner, respectively read their reports. The report on pharmacy dealt with the strength of ext. opii, the standardisation of ext. nux vomica, the estimation of spirits of nitre, the galenical preparations of pomegranate bark, and the unofficial rormulary. The report on botany dealt with tamus communis and elematis.

Owing to the lateness of the hour the report on chemistry by Mr. A. W. Duncan, F.C.S., was postponed until the next meeting. Mr. Elborne, in his report on materia medica, gave an interesting and succinct account of strophanthus and the preparation of its tineture. A large collection of new drugs (presented by commissioners of the various courts) from the Indian and Colonial Exhibition was on view.

MANCHESTER PHARMACEUTICAL ASSOCIATION. — The Committee of this Association have issued circulars to the effect that meetings will be held during the coming winter, on the second Wednesday in every month, at the rooms of the Chemical Club in the Victoria Hotel, the object being, it is stated, to bring matters of interest forward in an informal way. Membership is cordially invited at the reduced annual subscription of 5s. This action on the part of the executive will, it is hoped, bring together a large number of pharmacists to welcome the Conference during the forthcoming year.

CUTTING.—Lewis's firm, our great antagonist in the patentmedicine trade, although still dealing in such articles, do not seem to push them so vigorously as they did on first opening. They now devote only a minor portion of their magnificent frontage to the medicine department. Their general list, which measures 22 inches long by 9 wide, now prudently omits any line of vermin-killer. Quinine is not sold particularly cheap, Howard's being quoted 6s. 9d. per oz. bottle (another cutting firm of patent medicine dealers ask 13s. 4d.); codliver oil, finest Norwegian, 2s. 6d. per quart; castor oil, $10\frac{1}{2}d$. per 16 oz.; patents in general 91d. and 10d.; Pears's soap, 3d.; Dinneford's flesh straps, 5s. size for 3s. 6d.; Ashton and Parsons' homocepathic tinetures and spilules, 1s. size for 5d.; Jewsbury & Brown's tooth paste, 1s. 6d. size for 1s.; Carlsbad salts, 3s. 6d. size for 1s. 9d.; ipecacuanha lozenges, 1s. 11d. per lb.; chlorate of potash lozenges, 1s. 11d. per lb.; acid tart, 1s. 10d. per lb.; pulv. rhei., 7d. per oz.; pulv. borax, 8d. per lb.; mag. sulph., $3\frac{1}{2}d$. per lb.

NOTTINGHAM.

DEFICIENT LIME-WATER.—Before Alderman Goldschmidt and Mr. Starey, at the Nottingham Town Hall, on the 2nd inst., Mr. John Whitworth, chemist, was summoned for having sold, on October 6, a pint of lime water not of the nature, substance, and quality required. Mr. Harris (from the Town Clerk's office) appeared to prosecute, and said the lime-water on being analysed was found to contain but $2\frac{3}{30}$ grains of lime instead of 5 grains. Defendant admitted the offence, stating that he was unaware of the fact or he would not have sold it. Alderman Goldschmidt said negligence or oversight was no excuse in such a matter. Defendant was fined 5l.

OLDHAM.

CHEMISTS' ASSISTANTS' AND APPRENTICES' ASSOCIATION.—A meeting of this association was held on October 28, when papers were read by several members on some pharmaceutical subjects, each occupying about five or ten minutes in reading. This new feature proved a profitable change from the ordinary class work, as the papers read were very instructive, and in preparing the same the authors must have read some useful matter, which at some time may prove useful to them. The following were the papers read:—Mr. James Lees, on "The Manner of collecting Gum Acacia"; Mr. J. H. V. Wilkinson, on "Butyl Chloral Hydrate"; Mr. J. E. Wood, on "Quinine"; Mr. Andrew, on "Some Experiments with Antiseptics"; and Mr. C. G. Wood, on "Iodoform."

STAFFORD.

SHOP HOURS.—The following is circulated by a firm of chemists in this town:—

NOTICE.

SIR JOHN LUBBOCK'S SHOP HOURS REGULATION BILL, 1886.

[A Bill intituled on Act to limit the Hours of Labour of Young Persons in Shops ———.]

Whereas the health of many young persons employed in shops is seriously injured by reason of the length of the period of employment:

Be it therefore enacted by the Queen's Most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the anthority of the same, as follows:

"A young person shall not be employed in or about a shop for a longer period than seventy-four hours in any one week. 'Shop' means retail or wholesale shops in which assistants are employed for hire, &c., &c."

In conformity with the above, J. Maison & Son have arranged the following hours of business, in order to give their young men the full benefit of the Act, and respectfully invite the co-operation of their patrons to assist them in carrying out the provisions of the Bill, by sending their prescriptions and orders between the hours stated below.

HOURS OF BUSINESS:

8 A.M. to 8'30 P.M. SATURDAYS, 8 A.M. to 10 P.M. SUNDAYS, attendance at 53 Greengate Street on'y. Morning, 10; Evening, 6 to 8.

TORQUAY.

PROPOSED l'HARMACEUTICAL ASSOCIATION.—An entertainment, being one of a series of Saturday socials, was given on October 30, by several of the chemists (chiefly assistants) of the town. In the absence of Mr. E. Smith, the local secretary, Mr. Thornton presided. Mr. F. Riches was the accompanyist, and several songs were well rendere by Messrs. Morris, March, Bathe, Parsons, and Dunsford. Mr. Curtis gave two recitations, one being "The Newcastle pothecary," and Mr. W. Smith read "The Battle of the Vials 'from Marryatt's "Japhet in Search of a Father." The performers were afterwards entertained at supper by Mr. W. Bathe, and some discussion took place as to the formation of a pharmaceutical association for the town. Mr. W. Smith was appointed hon. sec. pro tem.

SCOTLAND.

ABERDEEN.

CHEMISTS' ASSISTANTS' AND APPRENTICES' ASSOCIATION.

—On October 29 Mr. A. A. Davidson read an interesting paper on "Some Characteristics of Modern Literature." Mr. Davidson held that literature was degenerating, and pointed out some of its principal blemishes, drawing attention to a number of grammatical mistakes committed by our best modern writers. He deplored the introduction of slang words and foreign phrases into our language, and concluded by expressing his belief that literature would yet revive. The paper was highly appreciated by a large audience.

EDINBURGH.

THE HIGHEST AWARD for grates has been given to the patent "Duplex," which is the invention of Dr. Inglis Clark, pharmaceutical chemist.

THE CHEMISTS' ASSISTANTS' ASSOCIATION will shortly discuss Sir John Lubbock's Shop Hours Regulation Bill. A member will move that the Association petition in favour of the Bill, and collect signatures in the city. An amendment will be moved.

GALASHIELS.

On October 28 the only son of Mr. Ross, druggist, Galashiels, a boy seven years of age, was accidentally drowned there.

GLASCOW.

The usual quarterly meeting of the Glasgow Chemists and Druggists' Price List Committee was recently held, when several alterations were made in prices. These were all in

favour of the purchaser, which still further exemplifies the competitive times we live in. A list of the alterations may be had, as heretofore, gratis, from any of the local wholesale houses, or members of the Committee, on receipt of a stamped addressed envelope.

A MEETING of the Glasgow chemists was held on Thursday, October 28, in Drummond's Temperance Hotel, Glassford Street, to endeavour to resuscitate the local association, which has been dead for some years past. There was a fair attendance. Mr. John Currie, Sauchiehall Street, occupied the chair. After a long discussion of the difficulties formerly encountered—late hours being especially dwelt upon—it was unanimously agreed to resuscitate the association. Mr. Alex. Kinninmont, South Portland Street, was elected president; Mr. John Foster, Sauchiehall Street, vice-president; Mr. Maltman (Glasgow Apothecaries' Company), treasurer; and Messrs. Arnott (Glasgow Apothecaries' Company), and Lees (Brown Bros.), joint secretaries.

MESSRS. FRAZER & GREEN, of Buchanan Street and branches, and Mr. John M'Millan, of Great Western Road and Hillhead, have issued a jointly signed card announcing that they have agreed to sell patent medicines and proprietary articles at co-operative store and wholesale grocers' prices, for cash only. On the back of the card they give the following specimens of their new cash prices:—6s. Allen's hair restorer, 3s. 4d.; 3s. 6d. Atkinson's perfumes, 2s. 4d.; 1s. 1½d. and 2s. 9d. Beecham's pills, 9½d. and 2s. 2d.; 1s. 1½d. and 2s. 9d. Cockle's pills, 9½d. and 2s. 2d.; 1s. and 2s. 6d. Dinneford's magnesia, 8½d. and 1s. 8d.; 6d. and 1s. Pears's soap, 3½d. and 7d.; 1s. Savory & Moore's infants' food, 7½d.; 2s. 6d. Seigel's syrup, 1s. 11d.

Poisoned with Sheep-dip.—Early last Saturday morning a labourer named Duncan M·Lellan, 36 years of age, residing at 27 Salisbury Street, Glasgow, was seen leaving the steamship Minard Castle, which was lying at Glasgow Harbour, and scarcely had he got on to the quay, than he became unconscious. Medical aid was procured, and on the stomach-pump being applied a quantity of liquid strongly smelling of sheep-dip was brought up. The mandied about half-past three, and he is supposed to have mistaken the cask of sheep-dip on board the steamer for whisky. He was seen coming from the place where the sheep dip was stored, while the bung of the cask was out, and a tube was found on deccased.

KILMARNOCK.

FIRE.—On Monday evening the premises of Messrs. Lamont & Son, drysalters, Kilmarnock, were completely destroyed by fire, several adjoining buildings also suffering more or less severely. The cause of the outbreak is not known. The loss is estimated at about 5,000*l.*, and is partially covered by insurance. Fortunately, large quantities of materials were stored in other premises, else the loss would have been much greater.

Obituary.

[Notices of Marriages and Deaths are inserted free if sent with proper authentication.]

APINALL.—On October 17, Mr. George Tattersall Apinall, chemist and druggist, Manningham. Aged 57.

HUMBLE.—On October 29, Mr. John Humble, chemist and druggist. Aged 78. Mr. Humble had retired from active business for some years, and at the time of his death was residing with his son, Mr. J. M. Humble, chemist, 29 Horse Fair, Birmingham (late Pedley's).

Joce.—On October 14, at Bideford, Mr. James Joce, chemist, and an alderman of the borough. Aged 77.

MALINGS.—On September 16, Mr. Joseph Edward Malings, chemist and druggist, Deddington. Aged 50.

MITCHELL.—On November 2, Mr. John Mitchell, chemist and druggist, Barnsley. Mr. Mitchell was one of the oldest tradesmen in the town.

North.—On October 16, Mr. George Taylor North, phatma centical chemist, Ponder's End. Aged 52.

Pharmaceutical Society of Great Britain.

COUNCIL MEETING.

THE Council met at 17 Bloomsbury Square, W.C., on Wednesday November 2 Miles Wednesday, November 3. The President, Mr. Michael Carteighe, took the chair at 11.15. The rest of the members of Council were present, and the minutes were read and confirmed. This done, a number of persons were elected members, associates in business, associates and students of the Society, and the following were restored to the register of chemists and druggists, viz.-

> John R. Davies, Guernsey. Albert Henry, Finsbury Park, N.

FINANCE COMMITTEE.

The report of this committee was read by the secretary; it

contained the usual items, and

The President, in moving its adoption, explained that although they appeared to be short of funds, they were not really so, and were daily expecting a cheque for over 2,000%. A considerable sum had also been invested during the year. He therefore proposed that the report should be adopted which it was.

BENEVOLENT FUND.

The report of the committee which administers this fund was also read. It referred to the cases which had been under the consideration of the committee; in six of these grants of 10% each were recommended, and in two cases grants of 51. each. One case was deferred, and another in which a grant was given was placed on the provisional list of prospective annuitants.

The VICE-PRESIDENT moved, and Mr. BOTTLE seconded, the

adoption of the report. (Agreed.)

LIBRARY, MUSEUM, LABORATORY, AND HOUSE.

The report of this committee, covering a period from July to September inclusive, which had been drawn up at a meeting held in the middle of last month, was read. librarian's report, so far as attendance and numbers of books lent out during each of the months, was satisfactory, as was also his report of the meeting of the Librarians' Association, which he had attended in his official capacity, and reported upon generally. Several missing books were also referred to.

The curator's report dealt with the attendance and donations. The latter included four handsomely-framed photos of the School of Pharmacy, Melbourne, which were presented by Mr. Bowen, President of the Pharmaceutical Society of Victoria, and which were exhibited in the Council Room.

The report also referred to the circulation of the Society's Journal and Transactions, with a copy of the list of Bene-

wolent Fund subscribers.

Mr. SCHACHT asked the President if he could account for

the books which were missing, which

The President did. He also moved the adoption of the report, and in doing so expressed his gratification that the works of art belonging to the Society had been added to in the shape of the photos presented by Mr. Bowen. In looking at these representations of the School of Pharmacy in Melbourne, he could not help envying their brethren in Victoria the support they got from the Government, and which had enabled the pharmaceutical society of the colony to build such a handsome school. They had previously congratulated that society on their prosperity, but that did not prevent him doing so again, and wishing them all success in their efforts for pharmaceutical education.

Dr. SYMES asked if the missing books would be announced in the usual way, to which the President replied that they

would.

Mr. WILLIAMS then referred to the absence from the report of any mention of the progress which was being made with the new premises. He reminded the President that there was a matter in reference to an examination hall and lecture hall which had been remitted to the Committee, and he gathered from the absence of any mention of it in the report that it had not been attended to.

The President, after consulting the minutes of a meeting

had been entrusted by the committee to a sub-committee, which was to meet, and did meet, the architect twice a week in reference to the sketch plans and other arrangements regarding the new house. That sub-committee had drawn up a report, which would be read that day in due course.

Mr. RICHARDSON protested against this way of doing business; it looked like smuggling the plans through. The whole Council ought to see them before they were decided

upon.

The PRESIDENT said that there was no smuggling about the matter at all, and the Council would have the plans submitted to them in due course. All that the sub-committee, composed of six, was doing was arranging about details.

Mr. WILLIAMS maintained that the sub-committee's report

should be made to the committee, not to the Council.

Dr. SYMES reminded the meeting that on a previous occasion the sketch plans were brought into the council-room, were placed upon the table, and were inspected by each member then present. Mr. Richardson seemed unaware of that, and he (the latter) confessed that he was not present, although he maintained that they ought to have been exhibited about the premises so that every member should see them. This created some laughter, as upon the occasion that the plans were inspected the Council went into committee, and so remained for an hour with the plans before them.

After some further conversation on the point raised by Mr. Williams, during which there seemed no hope of getting

rid of the objection,

Mr. BOTTLE proposed that the sub-committee be constituted a special committee, and on the suggestion of Mr. Hampson and others, the actual powers of this committee were defined in the motion.

Mr. SAVAGE seconded it.

There was still, however, some fear expressed lest the committee should go beyond its powers. The President and other members of the committee kept on explaining that it was only preliminary matters that they had charge of, and what they now had to report upon was the pulling down of an old wall and the disposal of the material thereof. Also the protection of neighbouring householders during the alterations on the back premises of which they had got possession, and an agreement with the proprietor of 17 Bloomsbury Square regarding a proposal to make a hole through a brick wall. These details given and understood, the report was adopted, and the Council went into committee for a few minutes while the President read a legal document regarding the hole in the brick wall, and to which (the document) the seal of the Society was authorised to be annexed.

GENERAL PURPOSES COMMITTEE.

This Committee had met on the previous evening, and now submitted the usual report on legal matters (which was read in committee) and also upon the Scottish memorial with recommendations thereanent. These were read in open council, and when that was done Mr. ALLEN moved that the Council resolve itself into a committee in order to consider one of the cases of infringement referred to in the solicitor's letter.

The Council resumed after luncheon, the first business being

THE NORTH BRITISH BRANCH.

For the settlement of the difficulty which has received so much of the Council's attention during the past two years the General Purposes Committee submitted the following recommendations:

1. That with a view to define the significance, application, and use of the term North British Branch, it is desirable to place on record that the use of the term shall be understood to apply to the Board of Examiners in Scotland; to the Executive referred to in Clause 2; to persons appointed to hold any honorary office by the Council and acting in Scotland in its behalf; and to the house and all other property of the Society in Edinburgh.

2. In order to assist the Council in its management of the Branch an Executive of not more than twenty-one members shall be formed, to be called the Executive of the North British Branch of the Pharmaceutical Society of Great

Britain.

3. The President and Vice-President of the Society and such members of Council as may be resident in Scotland shall held on July 14, and other meetings, stated that the matter be ex-officio members of the Executive. The others, to make up a number not exceeding twenty-one, shall be elected annually by the members and associates in business resident in Scotland. (Travelling expenses of members of the Executive living outside Edinburgh to be paid.)

4. The Executive shall elect a Chairman and Vice-Chairman from among their number, one of whom shall preside in the absence of the President or Vice-President of the Society.

5. The Chairman shall have charge of the funds voted for the use of the Branch.

6. It shall be the duty of the Executive to nominate persons for appointment as members of the Board of Examiners in Scotland.

7. The Executive shall report to the Council, and send vouchers for money expended, annually or more frequently if required so to do.

The PRESIDENT, in moving the adoption of the Committee's report, including these recommendations, said that the members would recollect that some months ago the Council came to the conclusion that the position of the Society's affairs in Scotland was unsatisfactory. The matter had from time to time been discussed, and they had met several deputations of their brethren from the North, and talked the matter over with them. The result was that the Council proposed that the title "North British Branch" should be abolished, and that, for the purpose of carrying on Scottish business, an Executive Committee, composed of members and associates in business of the Society resident in Scotland, should be appointed by the Council. proposals were not received with favour, and, on the Council taking steps to obtain an alteration in the by-laws which would authorise them to appoint this committee, certain Scottish members, who were opposed to the principle of the alteration on the ground that the charter did not authorise the Council to appoint committees outside their own number, took steps to prevent the authorisation of the by-laws by the Privy Council, with the result that the by-laws as a whole were not accepted; and so the power to appoint the Executive Committee was not obtained. Later the Council decided to go on with the by-laws, and so obtain the necessary power. Then they had the deputation composed of Mr. Watt and three other Scottish members, who came there in July, and submitted to them a memorial with strong expressions regarding the subject. Referring to that memorial, he recalled its main features, and the specific objections to the proposed by-law, their opinion being summed up in the following paragraph:

For these reasons the Scottish members cannot agree to the proposed alteration in the by-laws asking general powers, and would not be contented with less than a specific by-law entrusting the management of the Society's affairs in Scotland to an executive nominated and elected by members resident there, but subject to the approval of the Council.

He contended that the Scottish demands regarding a bylaw could not possibly be satisfied. They were entirely outside the charter and the 1852 Act, and he could assure them that if they attempted to introduce any such provision in a Bill, any Government draughtsman would strike out such a passage, which was not contemplated in the charter and the Act referred to. The powers therein given were these: one Society for Great Britain, with one executive body and two boards of examiners. The Scottish members of 1852 were a party to obtaining these powers. So now they had been driven to this point by their Scottish friends-they could not get a specific by-law, and they would not allow them to get a general one. The proposal for an executive committee for Scotland was accepted on both sides. Regarding the necessity which had induced this change in the title of the body, he said that their Scotch friends attributed the difficulty which had arisen to that Council, but he felt that there had been negligence on both sides—negligence of omission rather than of commission. Yet on the part of the Scottish members they had not, either by deputation or otherwise, admitted that they had committed faults. After some further remarks on this matter, he continued to narrate what the General Purposes Committee had done since July in order to settle the matter without further powers, and they had resolved to create the North British branch de novo, and he thought that would meet the Scotch proposals. It might be rather queer that he should submit such a proposal as this, con-

sidering the position which he had all along maintained. might be considered that he was a rather weak mortal to give in; but the solution, to his mind, lay in the definition of the word "branch." They knew that in business branches were places of business. (No, no.) Well, he would not refer to that... He admitted that it was difficult to be perfectly logical, but the proposal was an attempt to reconcile association of a body outside of themselves with them in the administration of the Society's affairs. He then referred to the powers which are to be given to the Executive Committee, and to its constitution, pointing out that seventeen members would fall to be elected by the Scottish members and associates in business. Then as regards the titles "president" and "vicepresident" of the branch, the committee could not see its way to accede to that, for this amongst other reasons-viz. that the president and vice-president of the Society would be members of the committee, and therefore no other could be on it, so the titles "chairman" and "vice-chairman" were those which came in for acceptance. He confessed that he had given way on the title North British Branch with reluctance. As to the position of chairman, it was proposed to make him also treasurer, so that the full weight of the responsibilities of his office should be upon him. He was aware that the title President of the Branch was one to which much value was attached in Edinburgh, owing to the public appearance which that officer was sometimes called upon to make. But tothat he answered that there were individuals in pharmacy in Edinburgh whose personal qualities alone would make their position, independent of title, important. (Hear, hear.) He asked them to consider that, and to accept the recommenda. tions which the committee now made. (Applause.)

Mr. SCHACHT said that he rose to say a few words in opposition, which he could not refrain from giving utterance to, although he was apparently in a hopeless minority. reminded the members of a resolution still standing that the North British Branch cease to exist. Now they were reestablishing it. This was a direct contradiction in terms. At the time that the first resolution was agreed upon it was thought convenient and right that they should abrogate the rights which the Scottish members were possessed of, and since that time no sufficient cause had been shown why that should be repealed. That was incongruity and contradiction No. 1. What was this branch to consist of? He found that it was to consist of factors essentially different from the original stem, which was made up of living things, while the branch was to be composed of living things—examiners, executive committee, and officers - and a dead thing, the house. Incongruity No. 2. Again, how were these twenty-onepersons to be called together for the government and control of the Society's property, and by what authority? They had no power to appoint a committee outside their own body. (llear, hear.) Then who was to call them together? It was said that the Scottish members would do that, but the Council were not to be asked to approve of them. Incongruity No. 3. He next referred to the chairman of the branch having charge of funds. The Council gave him the power, yet they would never hear or know anything about him, and could not approve of him. There, again, was a contradiction in terms. After some further remarks in the same strain, in which the speaker endeavoured to show that the position which the Council was taking up was wholly illogical, he concluded by warmly stating that it was his opinion that no compromise with Scottish members was possible, especially since certain gentlemen had opposed the Council in getting legal authority to give them a legal position. This opposition he strongly condemned, and threw the blame of the rejection of the by-laws wholly upon the Scottish members. He contended that the only thing left for the Council to do was to govern its Scottish affairs from Bloomsbury Square, and to give up the idea of having associated with them those who had driven the Council into a position of utter ridicule.

Dr. SYMES replied to Mr. Schacht's remarks. He recalled the fact that the previous proposal had not given satisfaction to Scottish members, and the result had been so disastrous that it was the duty of every member of the Council and of the Society to see that the matter was settled. Mr. Schacht proposed nothing, and if he got his way they could not hope to retain their Scottish influence. The present recommendations were not a slight upon the previous committee; indeed similar actions to that had previously been done in the

Council. It was true that the North British Branch was to be constituted de novo, but he reminded them that they had thirty years' existence of the title before them, and they could not afford to ignore that. After humorously referring to Mr. Schacht's "droll matter," Dr. Symes criticised his remarks regarding the proposed chairman's authority to hold funds. He thought them ridiculous, because that chairman would be a member of the Society; and they always inquired into the respectability of persons before they elected them members. (Laughter.) Moreover, he would be appointed by seventeen members, themselves selected by the whole 300 members of the Society in Scotland. What better guarantee of respectability and trustworthiness could they have? There was probably something illogical in the proposals; still, he hoped that the question would be settled. It was a matter worthy of a little sacrifice as to scruples, and the whole Council had considered it thoroughly, and had done all that it was legal for them to do. Therefore he hoped that the proposals would be unanimously accepted.

Mr. Hampson assumed that Mr. Schacht was a great admirer of the British Constitution—he only assumed that. (Laughter.) Well, the British Constitution was one of the most illogical things imaginable. He felt that they owed reparation to Scotland in the matter, having allowed their affairs to be carried on in a loose sort of manner for such a long time, and they must now settle it. The proposals might not be logical, but they were consistent, and were in the direction of settlement, whereas Mr. Schacht would simply

do nothing.

Mr. WOOLLEY protested against the proposals being brought forward so hastily; they were quite unknown to the members twenty-four hours, even six hours previously, for copies of the recommendations had only been placed in their hands that morning. Mr. Hampson had said that he did not mind being iilogical if he got what he wanted. (No, no, and protests, in reply to which Mr. Woolley read the words which he had taken down, and which appeared to imply that meaning.) Continuing, he protested against such steps as were proposed being taken that day. Members should have time to consider the whole matter. He also protested, amidst laughter, against the manner in which Dr. Symes took up the time of the meeting with his remarks about how respectable a man the chairman would be.

Mr. RICHARDSON rejoiced that a scheme had at last been proposed which was likely to meet with approval in Scotland. His sympathy had all along been with their friends in the North, and he did not think that they were wrong in contending for their rights. It was far better that they should have home rule, especially in those times. He would have liked to give the title President of the Branch; in Edinburgh it was much thought of, and he thanked the President for giving way; in doing so he showed loyalty to the Society, and he felt sure that the result would be that the Society

would be greatly strengthened.

Mr. ATKINS was pleased that the Council was now within measurable distance of the close of the long controversy. After referring to its origin and showing that the personal element was not in it, he remarked that in a certain sense Mr. Schacht's position was unassailable, and in the abstract he agreed with him. He reminded them, however, that the British constitution was not only illogical, but was based upon compromise. Were they reversing their previous decision? As to titles, that of the North British Branch was not conceded before, because they had not arrived at a decision as to what the branch was. They had now a definition, and therefore they could yield on the point. The view presented by Mr. Schacht was that Scotland should be governed from Bloomsbury Square. Was that a fair interpretation of his proposal? (Mr. Schaeht: Yes). Then that meant war to the knife. There was the sentiment which their Scotch friends had in the matter; the title had existed in the past, there were certain associations attached to it, and such a proposal as Mr. Schacht's would simply be suicidal to their Scotch interests. After some remarks upon the difference between the North British Branch and mere provincial branches, and some words disagreeing with Mr. Richardson's remarks regarding the local necessity for the title President, Mr. Atkins concluded by saying that he believed that in six months after this illogical compromise was agreed upon, the whole thing would be past, and they would be working quite smoothly.

Mr. WILLIAMS remarked that the compromise did not meet his views; he would have given the title Branch unconditionally, and he was sorry that the titles President and Vice-President were to be dropped. But he would not insist upon these points. He considered Mr. Schacht's abstract reasoning unworthy of further consideration.

Mr. Borland said he was exceedingly pleased that after so long turmoil they now saw their way to the end of the controversy. After mentioning its various stages he remarked that the branch was now to be placed in a better position, if not a legal one, and he thought that what was done that day would go far to help a settlement. The only thing remaining was the question of titles, but he thought from what he had seen and heard that Scottish pharmacists would give way on that. (Hear, hear.) As to placing the funds in the hands of the chairman, he thought that was a better business arrangement, and would concen-

trate the governing power into one person.

Mr. BAILDON said he would not take the responsibility of moving an amendment. The recommendations came upon him unexpectedly, and he would have liked more time to consider them. The titles would have pleased him better if they had been different, but in many respects the proposals were an agreeable surprise to him. In a sense, Scottish members were to get what they wanted, a sort of autonomy; they would conduct their own affairs, and the Society would profit by it, as had been the case in the past. He agreed with Mr. Schacht regarding the definition of the word "branch," but he was inclined to look upon it as the preamble of an Act of Parliament which defined the scope of the Act. Their position regarding the branch was that it was not before defined; it, so to speak, did not exist. Now it was defined, and the branch was just what they defined it to be. It might be an absurd definition, still it was one. He wished to say, in conclusion, that he had stated the case for Scotland to the best of his ability since he was made a member of the Council; and they had got the reality after which they were striving. The proposals would not please everybody, but he hoped that they would be received with a large measure of support.

Mr. BOTTLE failed to see why they should give to Scotland what they would not give to any other portion of the kingdom, and he only agreed to the proposals for the sake of settling the matter. He was rejoiced that the North British

Branch would now be put on a definite footing.

Mr. ROBBINS and the VICE-PRESIDENT also supported the proposals.

Mr. SCHACHT having asked who was to appoint the Exe-

cutive Committee,

The PRESIDENT humorously hinted at answering the question in private, and thanked Mr. Schacht for not killing him for inconsistency. In putting the motion to the meeting, he said that the Council desired to show to their Scottish friends that they wanted their sympathy and support. The Council had really always wanted to give them more powers, but unfortunately their Scottish friends misunderstood their motives. He trusted, however, that all this was at an end, and that they would now go on prosperously.

The motion was then put to the meeting, when it was carried, all members but Messrs. Schacht and Woolley voting

for it.

EXAMINERS AND CANDIDATES.

The PRESIDENT then read a motion passed by the Board of Examiners for England and Wales regarding the subject introduced by Dr. Symes at the last meeting of the Council. The Board recommended that all unsuccessful candidates in the technical examinations be informed by the chairman of the subjects in which they failed, and that all unsuccessful candidates in the preliminary examinations get similar information from the Secretary. This announcement was received with much apparent satisfaction. The Board of Examiners for Scotland stated that they had all along informed unsuccessful candidates, at the discretion of the chairman, of the subjects in which they failed.

The Board asked that the results of preliminary examination, so far as they relate to Scotland, be submitted to them

as they were received.

D1. SYMES moved and Mr. Cross seconded a motion bringing the foregoing recommendations into effect; the request

of the Board of Examiners for Scotland being, on the motion of the President, referred to the Library Committee.

PROPOSED EDUCATIONAL LEGISLATION.

Mr. Schacht then rose, in response to the President's request, to move a resolution, of which he had given notice, and which was printed on the agenda. It was in the following terms:—

That the Law and Parliamentary Committee be requested to draft a Bill, having for its object the amendment of the clauses of the Pharmacy Act which bear upon the Society's examinations, the amendments to be framed so as to admit the changes which have received the approval of the Council.

In speaking to this resolution, Mr. Schacht said that, although he had been in a hopeless minority in the question which had just been, he hoped, settled, yet he felt that in approaching this subject, which had for its object the more efficient training of pharmacists, and which had received a large share of the attention of the Council during the past four or five years, that he would be more in accord with his fellowmembers. He then referred at length to the origin of the curriculum scheme, in times when the word "curriculum" was yet unheard of; to the gradual development of opinion upon the subject until it reached the crystallising point, viz., when one of the professors of the Society (Professor Attfield) dealt in a comprehensive and able manner with the whole subject. It was at this time that the Council had taken up the matter with a view to the practical solution of the whole question. The result of their deliberations was, that they came to the conclusion that it was necessary to institute a compulsory curriculum of study. Upon the principle they were unanimous, although some of them might differ as to details. The first thing that was done to carry out the resolutions at which they arrived was to appeal to the Imperial Government, an opportunity having presented itself, and accordingly a Bill was drafted which contained certain proposals. That Bill was withdrawn. Next some of them thought that they could succeed by a slight modification of the by-laws, and that had been tried, but the Privy Council did not view the matter in the same light that some of them did, and the result was that they did not confirm the by-laws. They were now at a standstill, and the work which they had put into the matter was practically lost unless they went forward. The only thing that remained for them to do was to go forward and obtain power by Act of Parliament in the simplest possible form. That was what his motion contemplated, viz., to draft a Bill dealing with education alone. After referring to past Bills and the reason of their failure, he said that if they were to have such a Bill as he mentioned introduced, they could say that it was solely in the interests of the public good, there would be no outside opposition to it. He did not think that it would be necessary to get any section of the Government to take up the measure; they should merely get one of their friends in the Lower or Upper House to take it up. He then referred to the recent utterances on the subject of education. particularly to Mr. Greenish's address at Birmingham, and to Mr. Martin's at Newcastle-on Tyne. As to education and the manner in which provincial education had been supported, he said that they could not hope to promote the development or to ensure the success of education until it became a matter of necessity. He concluded by moving his resolution.

Mr. WOOLLEY seconded the motion.

Mr. Hills, in supporting it, said that nothing had occurred since the subject had last been before them to alter the views which were then expressed, except that now they had even more forcible reasons for going forward, for the reports which they periodically received from the examiners showed a lamentable state of matters amongst eandidates, and it was necessary to remedy that. He considered it a happy coincidence that they had that day settled, he hoped, the Scottish business. They could now go forward as a united body, assured, he trusted, of the support of their Scottish friends in the matter. They had always looked to their brethren in the North for guidance or support in matters of educational importance, for they were well known to hold advanced views in the matter.

Mr. Allen said that this question was eminently a young men's question, and he felt convinced that if the Council had never brought it forward young men would not have thought of it. He expressed his pleasure that the subject had been

introduced, because quite recently he had the opportunity of attending a meeting of the Chemists' Assistants' Association, at which the subject of Education and Examination was discussed. The discussion was in every respect an admirable one, and he was astonished to hear such accord of opinion amongst those whom the question of a curriculum affected most. On that account, if for no other, he would support the motion. In the meeting to which he referred the trade question was entirely eliminated. He trusted that the motion would receive the unanimous support of the Council.

Mr. Hampson agreed with Mr. Schacht as to the principle of his proposition, but he thought they should not go to Parliament with a measure solely devoted to the education question. There were other matters which it was expedient to introduce. For instance, he should like to see some proposal whereby every man who passed the examination should become a member of the Society. The Society was not increasing in strength, more especially in the members' class, and it appeared to him that this was a chance for doing something in the matter. There was also the question of titles, as to whether they should have two classes, chemists and druggists and pharmaceutical chemists. That was also a subject which might form a part of the measure.

Mr. WILLIAMS was astonished that Mr. Schacht should bring forward his proposal so soon after the Council had received a distinct rebuff from the Privy Council. Had they forgotten the treatment they had received on the last occasion that they again ventured to address the Government? He then referred in detail to the circumstances regarding the last Pharmacy Acts Amendment Bill, and the rejection of the by-laws by the Privy Council, and said that he thought it would be foolish to stir up the Government in the matter until they had some indication of a more favourable re-

ception.

Mr. Cross said it always caused him a pang of suffering when he turned up the results of the examination and found the miserable results therein revealed, and he felt that he would support anything which might help to stop such an undesirable state of things. He did not pity the students so much as the examiners, who had to deal with such a poor set of men. After giving some instances of the light manner in which students treat the examination, and the insufficiency of their preparation, he said that he had all along sympathised with the curriculum, and maintained the principle that an educational basis was the soundest for commercial success. He agreed with Mr. Hampson in his views regarding membership of the Society being conferred on all who pass the qualifying examination.

Mr. ATKINS, while sympathising with Mr. Schacht in the views which he had so well expressed, asked if there was any reason to believe that they would be more fortunate with legislation now than they were before. Was there any chance at all that they would succeed in going forward with a simple measure dealing with education solely? It was his opinion that there were serious considerations on the trade side, and these were not matters which could be put aside; for they must remember that reasons had to be given for proceeding with the measure, and these reasons covered also the trade questions. Moreover, there was the opinion outside that trade matters were more worthy of attention, and they must take that opinion into account. Then were they assured that the trade would support them? He thought not. He had read Mr. Dymond's paper and discussion upon it, and was pleased with them. He felt that they would do better to wait a little. There was no immediate prospect of getting the measure taken up by Government, and it could not be carried through as a private measure. Still he recognised the fact that in one respect there are at present exceptional opportunities, for if one House passed it, they might be certain that the other would. (Laughter.)

The VICE-PRESIDENT, while believing that something must be done, thought that this was not the time to proceed.

Mr. HAMPSON was allowed to speak again, and said he thought they should wait for a more favourable opportunity. The Privy Council were against them, being influenced by the opinion of their assessor, who was opposed to the imposition of a curriculum. Therefore, they should wait until the Privy Council had thought the matter over again.

Mr. Allen pointed out that there were two assessors, and one of them, Professor Maclagan, was in favour of the curticulum.

Mr. BAILDON said that their proposal was somewhat premature; there was no immediate necessity for proceeding with it. He was not quite sure about Scottish feeling on the question, for it had been lost sight of for some The question, however, was one of expediency. It was very doubtful whether they should go forward to legislation upon a single point. He felt that the trade question should go along with education. But he could not help expressing his conviction that examination failures were not solely due to defective education. There were other reasons: the examination itself was a difficult one to pass; it was somewhat cramped, so many subjects being compressed into one course of study and one day's examination, that the result necessarily was that many students became overbalanced. He felt that if candidates were allowed, as in many other examinations, to take the subjects in divisions, they would find that the failures would not be so numerous.

Mr. RADLEY having briefly expressed his views, The PRESIDENT remarked that the question of time did not come in now. All that was proposed was that the committee should draft a Bill, and when that came before the Council it would be decided whether it was expedient or not to go forward.

Mr. BORLAND said that when the subject was before Scotch members a few years ago they were agreed, as a rule, with advanced education, and he had no doubt that the case was so still. Regarding the question of titles, he felt that one

should be done away with.

The PRESIDENT said that, as far as opinion had been expressed, it seemed to be in accord with the principle of the curriculum; the only difficulty was on the question of expediency. After referring to Mr. Schacht's disregard of the practical difficulties in proceeding with the matter, he took up the subject of membership as introduced by Mr. Hampson. He reminded the members that this subject was nearly the cause of wrecking the 1868 Bill. The proposal was incorporated in the Bill, and called forth a large amount of opposition from passed men. He was then a member of the Council, and by various means, which he detailed, ultimately succeeded in getting the clause removed. Mr. Sandford, who was the President, was of the whole Council left alone in supporting the proposal, and when they ultimately succeeded in defeating it, Mr. Sandford very plainly told them that they were wrong, and they now knew that they were. If the matter were again introduced they must be prepared for opposition. After stating that in the opinion of the Government they should in future legislation deal with poisons, while the Pharmaceutical Society would deal with pharmacy, he said that there were two questions for consideration: (1) Were they to move? and (2) How would they move? It was his duty to tell them frankly that there was difficulty in getting a Bill through the House, even although it dealt with such a simple question as Mr. Schacht proposed. In the first place any Bill which might be introduced would be an amendment of the Pharmacy Act, and, secondly, as soon as it was introduced an opportunity was given to the Government and to private members to tack on to it all sorts of amendments upon the Act. Then, if they did not touch trade matters, they would have strong opposition, and the same would be the ease if they did introduce such. He then referred to the origin of the breach between the Privy Council and themselves, and said that it really arose on the question of poisons regulations. He quoted from Government reports of 1870 and the following year two strongly-expressed letters written by the medical officer of the Privy Council, in which the action of the Pharmaceutical Society in not carrying out their agreement regarding regulations for the storage of poisons was strongly condemned. These letters, although written by an officer who was no longer connected with the Privy Council, were referred to on every occasion on which the Pharmaceutical Society or its officers had any business to transact with the Council. This complaint had been dinned into his ears all the time he had been President of the Society, and he could assure them that it was a serious difficulty, and one which had to be faced. As to Dr. Greennow's position in the matter, he thought that he generally agreed with them. He was in favour of technical training, or previous training precedent to the examination. After protesting against the use of the word "rejected" by Mr. Williams in reference to the Privy Council's treatment of the by-laws, and stating that

they had failed to receive their sanction, he concluded by expressing the hope that the Council would accept the resolution; at all events, that it would pass nemine contradicente.

Mr. SCHACHT was then called upon to reply. In the first place, he strongly protested against the President's statement regarding the poisons regulations, and expressed his regret that, in his exalted capacity, he should give utterance to opinions so directly contrary to those held by the Council which had decided the matter. As to the Privy Council's statement, if he had been president, and had had said to him what Mr. Carteighe mentioned, he would have hurled it back to them, and told them that it was the Act of Parliament, not the Pharmaceutical Society, that was at fault. That would be his answer to the Privy Council.

The President: May I say, Mr. Schacht, that that was

my answer. (Laughter.)

Mr. Schacht, continuing, replied to the remarks which had been made on his proposal. He considered that the curriculum was indispensable for the training of the young men of their calling, and he felt sure that there would be no opposition to it. As to delay, that would have no effect. The position of political parties would remain much as it was

for the next forty years. Here attempts were made by Mr. Hampson to get Mr. Schacht to withdraw his motion, and by Mr. Greenish to postpone the discussion, as several of the members had left. The President could not see how the discussion could be postponed seeing that Mr. Schacht had replied, and after some conversation the Council divided on the motion, ten voting for it and two against it. Four members did not vote.

The resolution was accordingly carried.

MISCELLANEOUS BUSINESS.

The PRESIDENT then asked power to postpone the next evening meeting from the 10th to the 17th inst. if necessary, so that some of the commissioners of the Colonial Exhibition might have the opportunity of attending. This was permitted.

LOCAL SECRETARY FOR LEAMINGTON.

On the motion of the President, Mr. W. Hinton Pullen was appointed local secretary for Leamington, in the room of Mr. Davis, deceased. The President referred to Mr. Davis as one of the first pharmaceutical chemists and one of the founders of the Society. There was not a more zealous officer than he; he was one of the quiet men who did a lot of good work, and he had done good work for the Society, and his death was a distinct loss to them.

Some correspondence was then read, and the Council

adjourned a few minutes before five o'clock.

EXAMINATIONS.

AT a meeting of the Board of Examiners held in London, under the provisions of the Pharmacy Acts, on October 20, 21, 22, 27, and 28, the following passed the Major examination for registration as Pharmaceutical Chemists:-

Davidson, Peter, Insch Everard, Arthur Geo., Epping Hargrave, Matthew, London Hilton, Ivor Ajax Robinson, Myerscough Lewis, Arthur Jno., Abergavenny

Martin, William, Exeter Richards, Thos. Coombs, London Rye, Frank, Northampton Smee, Walter Wallis, Axminster Wright, Herbert Cassin, London

The following also passed the Minor examination for registration as Chemists and Druggists:-

Aplin, Albert Edwd., Weymouth Armitage, Jno. Lister, Mirfield Ashton, Geo., Buxton Atterbury, Clive, Burton-on-Trent Baker, Wm. Jas., Bradford Barnaby, Wm. Arthur, Lincoln Baselow, Arthur A. J., Cardiff Bentley, Jno. Riehd., Thirsk Birkett, Juo., Stockport Blankley, Thos. Ernest B., Sleaford Booth, Jas., Insch Buchanan, Margaret E., London

Calhaem, Richd. E. K., Bristol Carter, Joseph M., Manchester Church, Albert V. J., Norwich Clark, Hy. Sowerby, Barton-on-Humber Clark, Robinson U., Jarrow Cockle, Wm. By., Lynn Coleman, Frank Hy., Chapel Brampton Colley, Alfrd. Jas., Coventry Colman, Alfd. Ernest, Newport, Isle of Wight

Curtis, Harry Edwin, Watford Davies, Jno., Llandovery Davies, Jno. Albert, Aberystwith Davis, Geo. Albert, Cheltenham Duggieby, Septimns, Hull Edwards, Alfd. E., London Evans, Alfd. Philip, London Garibaldi, Joachim A., London Gibbs, Sydney, Eastbourne Gibson, Jno. Win., Richmond Green, Edmund C. F., Dover Griffiths, Richd. L., Llanidloes Harrison, Richd. C. C., Birmingham Heath, Hy. Stoneham, St. Mary Cray

Heath, Josiah W., Alcester Hewitt, Joseph, York Hill, Major, Sleaford Jones, Jas., Newcastle Emlyn Lewis, Jno. Lloyd, Llaudyssul Marrett, Chas. A., Peterborough Matthews, Hy. P., Aldershot Morris, Ernest Wm., Market Harborough

Neve, Mary Elizth. B., Easthourne Palmer, Frank T., Cheltenham Piuson, Harry E. K., London Pratt, Alfd. Jas., Chichester Ridley, Albert P., Ipswich hiley, Alfd. Thos., London Sloan, Robt. C., Penrith Sweetapple, Thos. T., Taunton Sykes, Jno., Heaton Chapel Tighe, Jno. Wynne, Exeter Turner, Richd. V., Exeter Vallance, Arthur C., Mansfield White, Wm. Everard, Bottesford

The Board of Examiners for Scotland met at the Society's House, 36 York Place, Edinburgh, on the 19th, 20th, 21st, and 22nd inst. The following candidates were successful:-

Major Examination.

Coull, George, Edinburgh

| Stephenson, Thomas, Edinburgh

Minor Examination.

Alexander, Thomas, Tullibody, by Stirling Aspinall, Hortensius, Liverpool Bisset, James, Edinburgh

Broadbent, John Beaumont, Honley Cruickshank, Gavin Lang, Aberdeen

Dalziel, Charles Michie, Edinburgh Govan, John Wallace, Leith Hector, Alexander Bnrnett, Aber-

deen King, Alexander William, Edinburgh

MacDougall, Allan Murray, Gree-

McGillivray, Finlay, Edinburgh Marshall, Alexander James, Linlithgow Miller, Thomas, Leitli Mitchell, James, Blairgowrie

Nairn, James, Aberdeen Ormiston, Robert, Alloa Simpson, Alexander Tweedie, Edinburgh

Thomson, Alexander, Belfast Troughton, Reginald, Edinburgh Wallace, William, Leith West, Arthur Thomas Taylor, Edin-

burgh Smith, Catherine Love, Glasgow

THE CHEMIST; OR, ALL THE SAME A THOUSAND YEARS HENCE.

(If the Local Government Board is right).

FOND PAPA. Well, my love, it is a bit of a puzzle what we are to make of Johnny. You see he's twenty-two, and he doesn't seem fit for anything. He wouldn't even do for the Church.

FOND MAMMA. He certainly is very dull and stupid; and then he's so careless, and makes such blunders; and Dr. Trouncem used to say be could not master the commonest

arithmetic—weights and measures, and so——
F. P. Eh? "Careless, and makes such blunders, and can't learn his weights and measure?" Wby—the very thing!

He's exactly fitted to be a chemist.

F. M. Why, to be sure! Fancy our never thinking of that before. That will do beautifully. We'll set him up with a nice corner shop, and our old kitchen scales will come in splendidly for him. You know they are very old and unreliable, and cook says she really must have some new ones, because she never can check the butcher within seven pounds or so. (They embrace with much joy.)

CHEMIST (late Johnny). So they've set me up as a chemist, eh? I always hated chemistry at old Trouncem's, years ago. Never could make head or tail of it-all about what the moon was made of, and why a balloon went up. I wonder whether that's what a chemist has to do-give people bits of information of that sort over the counter. Hullo !--here's a fellow who says he's a "traveller" called, and wants me to allow Jones & Co. to supply me with drugs. Then I suppose a chemist has something to do with selling drugs. I'll just ask the fellow about it. * * * Fellow says that is a chemist's business: wasn't a bad guess of mine, by Jove! All right, I'll tell the fellow to send me in a whole lot. * * * Now, here's a little boy come to say his mother has sent him round to ask whether I require an assistant. Of course, I'd better have an assistant; and anybody will do to hand pens'orths of drugs over a counter. I dare say he'll give

em too much for their money sometimes; that's the only difficulty. Never mind, we'll charge elevenpence in the shilling profit, and that 'll cover losses; and then there are the other articles the other traveller fellows say I shall have to sell—tooth-brushes, and soonges, and soop, and scent. As I'm a chemist, and have to charge for being a superior qualified person, I can charge three times as much for all these articles as a common uneducated grocer or brush-shop man would. Stop, there is one thing that traveller chap said a chemist must know; and that is to wrap up things more neatly than anybody else. Here, assistant; are you qualified to be a chemist's assistant? Can you wrap up things neatly? Hum !-not so badly. You can employ your time practising at it; and remember this axiom-If a chemist doesn't wear neat clothes, and wrap up things nicely, what the dooce excuse has he for charging more than other people? Traveller told me that.

Assistant. Please, sir, 'ere's a carman come with a lot o'

drugs.

CHEM. Eh? Oh, that's your business. Take 'em and put 'em in bottles. Here's a lot of bottles left by the last tenant; we'll put the stuff in them.

CARMAN. Well, but they've got a lot of odds and ends of old drugs in 'em, and you don't know which is which.

CHEM. Bless your soul!—what does that matter? Traveller told me a chemist is never over particular about trifles; it would take up too much time. Mix 'em up; it 'll give 'em a softer flavour. Now I'm off to have a game at billiards.
Assist. But, please, sir, 'ow am I to know where to find

what people asks for?

CHEM. Eh? Why-well, I don't know. Ask the carman

to label the things.

CAR. Well, gav'nor, I ain't much of a 'and at it. Most o' the chemist gents 'as a lot o' gummed labels in a dror, and takes hout a 'andful promiskus, and sticks 'em on as they comes. I've got a gen'ral sort o' notion that the black flooids is pizens, and the wite ones is 'armless (bein' the colour o' water); and the red 'uns is nice, and took for light hailments: and the yaller 'uns smells nasty, and is took for wuss complaints; but I carn't say as my knolledge is altogether skientific.

CHEM. That isn't a bad rule, though. That will do capi-

tally. Back again to tea. Ta, ta!

ASSIST. Here's a lark! I'll 'ave a good tuck in at tbem pear-drops; I knows them well ernuf! Hullo!—'ere's a ole

gent. comin' in screwed up. Yessir, please, sir.

CUSTOMER. I want this prescription made up. Please be very careful, because the last chemist I went to put in something that couldn't have been right. So far from curing that pain I have, it made my bead go round, and all my toe-nails come off with a pop.

Assist. All right, sir. I'll be werry careful. I expect he didn't weigh the things right. If I sit on one side of the scales with a lot o' these 'ere pear-drops as a hextra weight, there

can't be no mistake. 'Ere y'are, sir.

CUST. Thank you; it must be right, so beautifully wrapped up as that, and with such a nice little variegated string on it. Good day.

Assist. Why, it's as heavy as pap. 'Ullo! 'Ere's the old gent. back agen, curled up wuss than ever!

Cust. I feel sure you made up that prescription wrongly, somehow. That pain of mine is ten times worse, and all my hair has just dropped off in the street, and my legs will twist into knots, and the tip of my nose is turning bright blue, and I feel sick, and my eyes creak when I look about, and I've a singing in my ears, and palpitation, and heartburn, and headache, and St. Vitus's dance, and pimples on my teeth, and all my waistcoat buttons are dropping off, and my hat has got too small, and my boots-

CHEM. Hullo! What's this? Dear mc, I'm awfully sorry. It can't be the drugs. My assistant is a most experienced and careful—er—child. Tell you what, suppose you come round behind the counter and help yourself. Any bottle you like, don't be afraid of taking a good draught, I've lots of everything. Yes, try that bottle if you like the look of it.

Cust. Why really, I feel a deal better. It's very lucky I hit on that bottle. I really think that's the best plan to follow.

(And we really think so too; at any rate if the state of things recently unveiled by the Local Government Board be Fun. really in roque!)

THE SOCIETY OF CHEMICAL INDUSTRY.

ADDRESS BY SIR HENRY ROSCOE.

THE opening meeting of the session of the Manchester branch of the Society of Chemical Industry was held last night at the rooms of the Chemical Club, Victoria Buildings. There was a large gathering of the members of the Society

and their friends.

Sir Henry E. Roscoe, M.P., who presided, opened the proceedings with a brief address. After expressing the pleasure with which he attended the meeting, he thanked the members for their kindness in presenting, as they recently did, a memorial to the Council of the Owens College asking that he should be continued in some position in connection with that institution. He appreciated very much the confidence thus shown in him. The terms in which the incomorial was couched were much too flattering, but he must say that the expressions were not stronger than his desires had been. He had always felt that in this district, where the chemical industry occupied so important a place, it was important that the industry should be united and joined with science, and the efforts he had made in his tuition at the college had had this for one of its objects. That these efforts had not been wholly unavailing was shown by the very considerable number of pupils who now occupied positions of trust and importance in the chemical establishments of this district. Sir Henry went on to say that he thought he might congratulate the Society on what appeared to be an improvement in the general trade of the district. He did not know whether that improvement had yet reached the chemical industries, but he could not help thinking it would do so soon. In connection with this matter he wished to bring under their notice a subject which he thought of great importance to the chemical industries of this district. He referred, as they might easily understand, to the proposed Manchester Jubilee Exbibition. He wished to refer specially to section 3, which was set apart for chemical and allied industries. The worthy vice-chairman of their Society, Mr. Ivan Levinstein, was chairman of the Committee, and a more active, painstaking head of a committee of that kind could not have been found. Associated with Mr. Levinstein were many distinguished gentlemen interested in chemistry and its applications. The intention of the committee, he understood, was to have an exhibition of chemical products, chemical apparatus, and chemical processes such as, for extent and perfection of arrangement, had never yet been witnessed. The different stages of manufacture from the raw material to the finished article would be carefully shown. He hoped the Manchester industrial chemists would put their best foot foremost and assist the exhibition authorities to show the great strides that had been made by the chemical manufactures of this district during the last fifty years. Some idea of the extent of that section of the exhibition in which they were particularly interested might be formed from the fact that the space set apart for it was 48,000 square feet. The section had been divided into seventeen classes, and if a good representation of the various classes could be secured the exhibition would be a better one than had ever been seen before. He hoped the members of the Society would do what they could to make the exhibition second to none that had yet been held. (Applause.) Looking at the matter even from a pounds, shillings, and pence point of view, he thought it would be worth their while to take the matter in hand. Sir Henry concluded his address with a short description of the Chemical Institute recently built at Zürich at a cost of 70,000%, in order to show what might be done in England if the people had the same views as people on the Continent with regard to the applications of science.

In the absence of Mr. Ivan Levinstein, the vice-chairman,

In the absence of Mr. Ivan Levinstein, the vice-chairman, Mr. Watson Smith read some notes prepared by that gentleman on the subject of two chemical substances recently introduced into the field of chemical industry. The first

substance is a new compound called—

SALOL,

which he described as an anti-rheumatic par excellence. Explaining its chemical constitution, the process of its manufacture, and its general properties, he specially directed attention to its antipyretic, antiscptic, and anti-rheumatic qualities. It acts not only more powerfully than salicylic acid in acute and chronic rheumatism, but it possesses the

very great advantage over this hitherto considered most valuable drug in the treatment of acute rheumatism, that it does not cause any disturbance of the digestive functions, which unfortunately in very many cases prohibits the use of salicylic acid. Being insoluble in water, it passes unaltered through the stomach, and is afterwards decomposed by the ferments of the pancreas. It is also a powerful antiseptic, and being neither caustic nor irritating to the skin, it may be found, Mr. Levinstein thinks, of the highest value for surgical operations. The next new chemical substance to which Mr. Levinstein referred was

LANOLINE.

This substance in its pure state was, he said, known to chemists and physiologists for many years as cholesterin, and is found present in the animal as well as in the vegetable kingdom. Liebreich observed that cholesterin absorbs more than 100 per cent. of water, and he called this combination of pure cholesterin and water "lanoline." The credit was also due to him of having first called attention to its therapeutic properties. He also showed its presence in the human epidermis, in hair, whalebone, &c. Lanoline, or cholesterin, was known previously to exist in the hair, in blood, in bile, and gallstones. The latter principally consist of cholesterin, and have hitherto furnished the material for obtaining it for scientific purposes. Cholesterin is also found in large quantities in wool-grease, and this now furnishes the material for the industrial manufacture of lanoline. Mr. Levinstein described the method of preparing pure lanoline from woolgrease, and after describing its general qualities he referred to the one remarkable property on which its great value principally depends, and which puts it at once above vascline, paraffin, lard, &c., for all medicinal or therapeutic purposes, viz., its very quick absorption by the skin. While vascline or petroleum jelly, for instance, directly hinders the passage of medicaments into the skin, so that even some poisonous substances mixed with vaseline and rubbed into the skin produce neither local nor general symptoms of poisoning, lanoline is absorbed by the skin with the greatest ease. So marked is its power of penetrating the epidermis that when mixed with poisonous drugs only about half the usual proportions should be prescribed in ointments. It was, however, necessary that the lanoline should be pure. There had existed for a number of years all kinds of preparations under various names, such as wool fat, wool oil, &c., but these contain impurities which are directly injurious. Already lanoline has found application in ointments, plasters, salves, &c., and it has also been introduced as a commercial product into various branches of industry, such as perfumery, soaps, creams, pomades. It was impossible to foresee, indeed, the manifold applications which it may yet find in medicine, arts, and manufactures. Another substance Mr. Levinstein briefly alluded to was the very latest febrifuge, viz., the

ANTIFEBRINE,

which has been known to chemists for a number of years as acetanilid, and which is said to be the most powerful agent for reducing the temperature of the blood.

Mr. Watson Smith demonstrated two new tests for the identification of resorcinol and thalline, one of the new antipyretics, and their distinction from phenol (carbolic acid) and the other antipyrctics or febrifuges, antipyrine, kairine, and antifebrine. The reagent employed was beta-naphthoquinone, dissolved in water to form a dilute solution. On adding resorcinol dissolved in water no change occurs until a few drops of ammonia are run in, when a fine bluish green colour is developed, changing to a fine red on acidifying with nitric acid. Ether or chloroform dissolve out the colour, and float or sink, forming red-coloured layers. With thalline tartrate or sulphate, on addition of a few drops of caustic soda to the quinone solution, a fine red colour develops, the beauty of which is heightened by acidifying with nitric acid. Ether and chloroform extract the colour as in the case of resorcinol. Neither phenol, naphthol, nor the other bodies named give any colour changes, and Mr. Smith pointed out the value of the tests in therapeutical chemistry, and also showed how in the case of salol, referred to by Mr. Levinstein, a salol made from phenol could readily be distinguished from one made from resorcinol by the application of one of the foregoing tests, after a fusion with pure potash.

A vote of thanks to Sir Henry Roscoe for presiding con-

cluded the proceedings.

A BILL TO REGULATE THE HOURS OF LABOUR IN SHOPS.

WHEREAS the health of many persons employed in shops is seriously injured by recognition is seriously injured by reason of the length of the period of employment therein, and it is expedient to provide

for the limitation of such period:

Be it therefore enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows :-

1. This Act may be cited as the Shop Hours Act, 1886.

2. Subject to the provisions of any order made by a local authority as hereafter in this Act mentioned, all shops of every class, other than any of the classes described in the schedule to this Act, shall be closed at an hour not later than ten o'clock in the evening on Saturday in each week, or on such other day in each week as may be appointed from time to time in the case of any district by the local authority in lieu of Saturday; and not later than eight o'clock in the evening on every other day in the week:

Provided that on any day next preceding a public or bank holiday, or, where such preceding day is a Sunday, on the previous Saturday, such shops may, notwithstanding anything in this section, remain open until ten o'clock in the evening.

3. (1) If an application is received by the local authority of any district praying that an order may be made for effecting, to the extent specified in the application, any of the purposes hereafter in this section mentioned, and the local authority are satisfied that such application is signed by not less than two thirds in number of the occupiers of shops within the district belonging to the class or to each of the classes to which such application relates, the local authority may make an order giving effect to the said application.

(2) The purposes for which the local authority of a district may make orders under this section are the following; that

is to say,-

(a.) Permitting shops within the district belonging to any class or classes not mentioned in the schedule to this Act to remain open on each day, or on any specified day or days, of the week until such hour, later than the hour herebefore in this Act appointed in that behalf, as may be specified in the order:

(b.) Requiring all shops within the district belonging to any class or classes not mentioned in the schedule to this Act to be closed on one specified day in each week, at or before any hour not earlier than two o'clock in the afternoon, which may be specified in the

order.

4. With respect to an order of a local authority under this Act the following provisions shall have effect: that is to

(1) Such order shall take effect at a date named therein, being not less than two months after the making thereof, and shall before that date be published in such manner as to the local authority making the order may appear best fitted to insure publicity for the same, and on and after that date the said order shall have effect as if it were enacted in this Act:

(2) Such order may be expressed to have effect only during any specified part or parts of the year, and shall have effect accordingly, but, unless so limited,

shall have effect throughout the year:

(3) The central authority may make regulations as to the form of such orders and of applications for the same, and as to the evidence to be produced respecting the proportion of persons signing such applications, and as to the classification of shops for the purposes of this Act; and any such regulations shall be published in such manner as the authority making the same may direct, and shall be duly observed.

5. (1) An order of a local authority under this Act may from time to time be amended by a subsequent order made upon the like application, and subject to the like provisions, and having the like effect as if it were an original order.

(2) If at any time it is made to appear to the satisfaction of the local authority that more than one-third in number of

the occupiers of shops, to which an order for the time being in force under this Act relates, or of any class of such shops, are opposed to the continuance of such order, it shall be the duty of the local authority to revoke the said order, or to revoke the same in so far as it affects such class of shops as aforesaid, and thereupon such order, in so far as it is so revoked, shall cease to have effect, but the revocation of an order shall be without prejudice to the making of another order under this Act.

6. A shop in which trades of two or more classes are carried on shall be closed for the purpose of all such trades at the hour at which it is by this Act or by any order made thereunder required to be closed for the purpose of any of

them.

7. If any question arises as to the classification of shops or trades for the purposes of this Act, or whether any particular shop or shops is or are included in any class to which any of the provisions of this Act or any application or order under this Act extends, such question may be referred to the central authority, whose decision on such question shall be

8. Where any shop is open after the hour at which it is required by this Act, or by an order made under this Act, to be closed, the occupier of such shop shall be liable to a fine

not exceeding five pounds.

9. (1) Where an offence for which the occupier of a shop is liable under this Act to a fine has in fact been committed by some agent or servant of such occupier, such agent or servant shall be liable to the same fine as if he were the

occupier.

(2) Where the occupier of a shop is charged with an offence against this Act or any order made thereunder, he shall be entitled upon information duly laid by him to have any agent or servant whom he charges as the actual offender brought before the court at the time appointed for hearing the charge; and if after the commission of the offence has been proved the court is satisfied that the said agent or servant committed the offence in question without the knowledge, consent, or connivance, or wilful neglect or default of the said occupier, the said occupier shall be exempt from any fine.

10. All offences against this Act or any order of a local authority made thereunder shall be prosecuted, and all fines under this Act shall be recovered, in like manner as offences and fines are prosccuted and recovered under the Factory and Workshop Act, 1878, and sections eighty-eight, eighty-nine, ninety, and ninety-one of the said Act, and the provisions relating to the application of the said Act to Scotland and Ireland, shall so far as they are applicable have effect as if re-cnacted in this Act and in terms made applicable thereto:

Provided that in England or Ireland a prosecution shall not be instituted against any person for an offence against this Act or any order made thereunder except by or with the consent in writing of the chief officer of police having authority in the place where the offence was committed, or with the consent in writing of two justices of the peace, or of a stipendiary magistrate having jurisdiction in the place where such offence was committed; and such prosecution shall not be heard before the justices of the peace or stipendiary magistrate with whose consent the same has been instituted.

(2) It shall be the duty in England and Ireland of every chief officer of police, and in Scotland of every procurator fiscal, to cause the provisions of this Act and of any order made thereunder to be duly enforced throughout the area in

which he has authority.

11. A pharmaceutical chemist or chemist and druggist shall not be liable to any fine under this Act for supplying medicines, drugs, or medical appliances after the hour appointed by this Act or by any order made thereunder for the closing of shops; but this section shall not be deemed to authorise a pharmaceutical chemist or chemist and druggist to keep open shop after the said hour.

12. Nothing in this Act or in any order made thereunder

shall render the occupier of any premises liable to a fine for supplying any article to any person lodging in such pre-

13. Whereas by the Act of the session of the twenty-ninth year of the reign of King Charles the Second, chapter seven, intituled "An Act for the better observation of the Lord's Day, commonly called Sunday," it is enacted "that no tradesman, artificer, workman, labourer, or other person whatsoever shall do or exercise any worldly labour, business, or work of their ordinary callings upon the Lord's Day or any part thereof (works of necessity and charity only excepted), and that every person, being of the age of fourteen years or upwards, offending in the premises, shall for every such offence forfeit the sum of five shillings;" and it is expedient to amend the said enactment in manner in this section mentioned: Be it therefore enacted, that from and after the commencement of this Act the words "a sum not exceeding one pound" shall be deemed to be substituted in the said recited enactment for the words "the sum of five shillings," and that enactment shall have effect accordingly.

14. In this Act, unless the context otherwise requires, the following words and expressions shall have the meanings hereby assigned to them respectively; that is to say,

"Shop" means any building or portion of a building, booth, stall, or place where goods are exposed or

offered for sale by retail;

- "Closed" means not open for the serving of any customer; provided that nothing in this Act or any order made thereunder shall be deemed to render unlawful the continuance in a shop after the hour appointed for the closing thereof of any customers who were in the sliop immediately before that hour, or the serving of such customers during their continuance
- "Local authority"-

(a.) in the city of London and the liberties thereof, means the mayor and commonalty and citizens of London acting by the Common Council; and

(b.) elsewhere in the metropolis within the meaning of the Metropolis Management Act, 1855, means the

Metropolitan Board of Works; and

(c.) in any part of England outside the metropolis, means any urban or rural sanitary authority within the meaning of the Public Health Act, 1875; and

(d.) in Scotland, means the local authority under the

Public Health (Scotland) Act, 1867; and (e.) in Ireland, means an urban or rural sanitary

authority within the meaning of the Public Health (Ireland) Act, 1878;

"District" means the area in which a local authority has jurisdiction:

"Central authority"-

- (a.) in England, means the Local Government Board;
- (b.) in Scotland, means the Secretary for Scotland; and
- (c.) in Ireland, means the Local Government Board for Ireland;
- "Chief officer of police" means-

(a.) in the city of London and the liberties thereof, the Commissioner of City Police; and

(b.) in the Metropolitan Police District, the Commissioner or any Assistant Commissioner of police of

the metropolis; and (c.) elsewhere in England, the chief constable, or head constable, or other officer by whatever name called, having the chief local command of the police in any county, riding, parts, division, or liberty of a county, borough, town, place, or combination of places maintaining a separate police force; and

(d.) in the police district of Dublin metropolis, the Chief Commissioner of the Police for the said dis-

trict: and

(e.) elsewhere in Ireland, the county inspector of the Royal Irish Constabulary in any district over which a county inspector is appointed.

15. This Act shall come into operation on the first day of January one thousand eight hundred and eighty-seven, which day is in this Act referred to as the commencement of this Act.

THE SCHEDULE.

Premises in which any intoxicating liquor is sold by retail for consumption on the premises.

Refreshment houses. Tobacconists' shops. Newsagencies.

Personalities.

MR. JAMES F. FLETCHER, representative of Messrs. Evans, Sons & Co., Liverpool, has removed to No. 2 Upton View, Hoole Road, Chester.

MR. M. H. STYLES, pharmaceutical chemist of Doncaster, has been elected honorary secretary of the Doncaster Scientific and Microscopic Society, and Mr. J. T. Hasselby, also of Doncaster, pharmaceutical chemist, has been elected on the council of the same society.

On October 28 the Senate of the Royal University, Dublin, conferred the degree of Doctor of Science honoris causa upon James Bell, Ph.D., F.R.S., the eminent director of the Inland Revenue Laboratory, Somerset House, in recognition of the distinguished services which he has rendered to science.

MR. GEORGE BREEZE, Chemist, Catherine Street, Devonport, has been re-elected a member for St. Aubyn's Ward in the Devonport Town Council. Mr. Breeze was at the top of the poll. Mr. Allworth Simpson, of Stalybridge, occupies a similar position.

MATERIA MEDICA CHAIR ABERDEEN UNIVERSITY.—We understand that Dr. Ralph Stockman, assistant to Professor T. R. Fraser, is one of the applicants for the Aberdeen professorship. Dr. Stockman, though a young man, has already given strong evidence of his capabilities as a teacher and as an original worker. His able monograph on the active principal of senna leaves, communicated to the North British Branch, first made him known to pharmacists.

ACCIDENT.—As Mr. Richard Harland, representative of Messrs. Maw, Son, & Thompson, was passing an ironmonger's shop in Lancaster about closing time, a heavy iron bar was suddenly thrust upwards from the cellar window, striking him on the leg with such force as to throw him down. He has had to relinquish his journey, which is being continued by Mr. C. Martin, and his medical attendant intimates that he will probably be confined to the house for several weeks.

WILLS OF MEDICAL MEN.

THE Lancet publishes the following particulars regarding the estates of medical men recently deceased:—

The Scotch confirmation of the will of John Findlay Arthur, M.D., C.S.I., surgeon-major, retired list, Madras Army, of Lochside House, New Cumnock, who died on July 26 last, was resealed in London on October 20, the value of the personal estate amounting to upwards of 28,000l.

The will of Mr. John Archer, surgeon, late of 9 Carpenter Road, Edgbaston, Birmingham, who died on March 8 last, shows the value of the personal estate to be over 23,000l.

The will of Alfred Parr, M.D., late of Ravenleigh, Betchworth, Surrey, who died on June 19 last, was proved on August 21, the value of the personal estate amounting to over 16,000%.

Walter Moxon, M.D., late of Northolme, Broadlands, Highgate, and of 6 Finsbury Circus, died on July 21 last. His will was proved on August 13, the value of the personal estate exceeding 11,000l.

The will of Thomas Ross Jameson, M.D., inspector-general army hospitals, late of Lympstone, Devon, who died on July 6 last, was proved ou August 23, the value of the personal estate amounting to upwards of 10,000l.

The will and codicil of Christopher Joseph Madden, M.D., L.R.C.S.I., late of 12 Northwick Terrace, Maida Vale, who died on August 8 last, were proved on September 4. The value of the personal estate amounts to over 7,000l.

The will of Robert James Mann, M.D., late of 5 Kingsdown Villas, Wandsworth Common, who died on August 4 last, was proved on September 3. The value of the personal estate is over 2,000l.

The will of John Wills, M.D., of Pembroke Terrace, St. Helier, Jersey, who died on July 21 last, was proved on September 20, the value of the personal estate within the jurisdiction of the English Court being over 900l.

The will of Dr. W. A. McKellar has been proved at Glasgow, the personality amounting to over 12,000l.

A PERILOUS EXPERIMENT.

BY MATTHIAS MOONEY, A.P.S.

AM naturally a nervous, and perhaps even morbidly con-A scientious man. Your bold, unscrupulous fellows might consider me timid, and certainly I have sometimes been afraid where no fear was if I imagined myself to have been doing wrong; but the eircumstance I am now about to relate was really a terrible one, and justified my fright. I write, however, not for my own justification, but as a warning to my fellow-pharmacists, if I may be allowed the expression.

Some years ago I was acting as managing assistant to Mr. Brougham Topps (facetiously called Scoparii cacumina by his brother-chemists), whose "first-class pharmacy" is one of the most conspicuous objects in the main street of a rising watering-place on the L-eoast. One evening in the wintertime I had just lighted the gas, and, being slack, had sat down to compose a few testimonials to the virtues of "Topps's Far-famed Liveforever Pills," when I heard a heavy tread on the door step. Before going further, however, I must explain (though it will be unnecessary to those who know mc) that the testimonials in question were not intended for publication. I would scorn to impose even upon "cheaptrippers" in so unprincipled a manner, but, having often read the wonderful accounts published by proprietors of popular patent medicines of the cures wrought by their comparatively worthless nostrums, I had been much disappointed to find no letters arrive from purchasers of our pills, to the concoction of which I had given three months' unremitting thought, and which I firmly believed to be all that their name implied. I was therefore trying innocently to solace myself by anticipating for my own private pleasure the verdiet which I felt assured the public would sooner or later pass upon this invaluable medicine (see handbills) when I was interrupted in the manner I have stated.

Hurrying to the counter I found myself confronted by Major Blower, an excellent customer, whom I knew as an occasional visitor at a private hotel over the way. He was, I understood, a retired Indian officer, and was a gentleman of a robust habit and choleric, though not unamiable, temper. "Mr. Topps," said he, not waiting to exchange any compliments," Mr. Topps, can you give me any certain but quite safe emetic?" (I may mention that my principal being but seldom at business, I was usually taken for him by comparative strangers, and was weak enough to be flattered by the mistake). "Certainly, sir," I answered; "there is ipecacuanha wine or powder, sulphate of zinc..." "I want something we can disguise," he interrupted; "the fact is, Mr. Topp, one of the servants at the hotel is stealing my wine, and I want to eatch the thief." "Ah!" I said. To speak the truth, I was doubtful of the wisdom of the experiment: accidents might happen; and was it justifiable to risk any serious injury even to a pilfering maid-servant? But then Major Blower was such an excellent eustomer, and a man it was impossible to argue with; and I was slack; and he might go to old Palsby round the corner; and -- in short, I said: 'Ah! you must have some antimonial wine, Major Blower; ipecacuanha is too uncertain." "But is antimony safe?" asked: "I don't want to kill the rascal." "Quite safe," I replied, "in the dose I will give you. Bring your bottle over here with only about a glass of wine in it: I will put in a

maximum dose of the emetic, and the thief shall be caught. This accordingly was done, and the night passed over. Next morning about lunch-time, Major Blower again entered the pharmacy, but with a look of evident disappointment on his face. "We have erred on the side of leniency, Mr. Topps," he said; "my wine is gone, but nobody is ill; you must give me a stronger dose."

I was now seriously alarmed, but in vain I urged Major Blower to wait and watch: the emetie he would have, and though groaning inwardly at the thought of the risk I ran, I again poisoned his wine and let him go.

But oh! the agonies of mind I suffered that livelong day and night! During the day, indeed, I was fairly busy and had not much time to torment myself, but in the evening there was but little to do, and a thousand fiends plagued me with suggestions of all sorts of evil that might happen. To drive them away I tried, but in vain, to fix my mind on other subjects, and took up again my grateful task of testimonial-

writing. I had got almost interested in a supposed ease of a girl who was writing to thank me for the good she had received, under Providence, from the use of the Liveforever Pills," after having, in the pathetic and suggestive language of Holy Scripture, "suffered many things of many physicians," when the thought of some poor girl at Wilson's hotel lying at that moment in the pangs of death through my weak compliance came over me with such a force that I was obliged to desist, shut up the establishment, and rush off to a neighbouring public-house, where I tried to drown reflection in a small whisky, hot.

I scarcely know how I lived through that night. In fear and trembling I took down the shutters next morning (the boy, as usual, was late), expecting to find a policeman or a doctor on the doorstep. But no! I had no one in before breakfast, and went accordingly to that meal with a somewhat lightened heart. Mr. Topps did not reside on the premises. I had finished my first cup of eoffec when "Clang! went the shop-bell. I answered it at once. There before me, puffing, panting, out of breath, half-dead with horror and hurry, was Mr. Wilson, the hotel proprietor!

"O, Mr. Mooney! oh dear! oh dear! a little sal volatile, if you please! Oh dear, what a dreadful thing! what shall we do?" "O, Mr. Wilson, what is the matter?" "Is your boy in? Oh dear! oh dear! Let him run to Dr. Leech's at once. The poor girl! She is dying. Mr. Mooney; send instantly for the doctor," and before I had recovere I myself sufficiently to ask any particulars Mr. Wilson was gone.

I despatched the lad at once for a medical man. myself, I walked up and down the shop in an agony of remorse and terror; I recollected all the cases of antimonial poisoning I had ever heard of; the Bravo case rushed into my mind, and I squirmed as I thought of it. I was a murderer! my poor mother! my dear Eliza! oh dear, if the doctor would but come! At last the door opened. It was my messenger. The doctor was out! "Have you been to the hotel?" "Yes, sir." "How is the poor girl?" "Dan' no, sir." "Which is it?" "Ain't heerd, sir; but I reckon it's the white-faced un as have been there so long; 'cos I seed Major Blower as I war agoing 'ome last night, and he said I war to tell you as she war a-looking main sickly, and he thought she'd be bad afore long.

I groaned aloud; I could stand it no longer; I must go to the hotel though I incriminated myself, and know the worst. As I was starting Mr. Wilson came in again. "How is your patient?" I asked, trembling, but endeavouring to conceal ny emotion. "No better," he answered shortly: "we are going to send her away; can your boy fetch a cab?" "But the poor girl," I urged, "which is it?" "Oh," he said, "it's the pale one you've seen come on errands." I grasped the counter, and gasped for breath. "She has been with us only a few weeks," he continued, "and the doetor, who has just come in, says it's a fit-epilepsy-she is subject to 'em, and had better go home again."
"Here, boy!" I sung out cheerily, "run down to the mews

for a cab, and look sharp, you young monkey; the day is half gone and not a hand's turn of work done. Be off!

I saw it all now. There were two pale-faced girls at the hotel, and I was not a murderer; no, thank heaven! no murderer-yet, at all events. But was the danger over?

I was getting a snack in the middle of the morning (for my breakfast had been spoiled for me) when "that dreadful bell" again sounded, and I heard my name called loudly in a tone between a gasp and a bellow, whilst at the same moment a violent thumping and stamping on counter and floor made all the glasses ring. I rushed into the shop with my heart in my mouth. There, holding by the counter, a formidable cane in his fist, his hair on end, his eyes distended and bloodshot, and his usually rosy face now "sicklied over with a pale cast" of greenish-yellow, stood Major Blower. "Ah, you dog! you poisoner, you! Let me get at you!" he roared as I came into view; "I'll kill you! I'll—Oh Lord! oh Lord! its coming on again! oh-h-h!" and dropping into a chair he seized hold of a two-quart glass filter of the Silicated Carbon Company's that stood near, and began pumping up the contents of his stomach into it with a violence and abandon suggestive of the channel passage in a gale of wind. To add to the horror of the situation, Mr. Topps at this moment entered the shop. Now, Mr. Topps is, I regret to say, a gentleman of a most irascible temper and of almost draconian severity. I am, as I have already stated, naturally timid.

To remain for the *denoûment* was, for me, impossible. Luckily my hat was on the counter; there was no time to hesitate. "A case of misadventure, sir," I said. "Wrong bottle tartar emetic, I fancy; I'll run down for Dr. Leech," and before he could stop me I tore out of the shop and flew down the street as if all the police of the township were after me. Five minutes later I was seated in a third-class carriage on the——and——railway, bound I knew not whither, but resolved never again to show myself in Sandthwaite-on-mud.

Nor did I. Explanation, followed, of course; and, eventually, perhaps matters might have been arranged so as to allow of my returning to my situation. It was really not my fault that Major Blower had inadventently drunk out of the bottle he had prepared for another, nor was it true, as he alleged, that I had put in a poisonous dose. But my nerves had been terribly shaken; I felt that Mr. Topps's confidence in my discretion had been somewhat shaken too; and as my dear Eliza happened a few weeks afterwards to succeed to a nice little legacy, I determined to turn to my own account those abilities which I felt could never have free scope under the direction of another and possibly an uncongenial mind. In short, Eliza and I were married, and I took a neat little shop in my native town, where already Mooney's "Magie Pills "and "Restorative Drops" have acquired a not inconsiderable fame.

QUILLAIA BARK AS A SUBSTITUTE FOR SENEGA ROOT,*

BY FREDERICK B. POWER.

A FTER a brief reference to the present uses of quillaia bark the author states that in reviewing the chemical literature of the subject considerable discrepancy will be found in connection with the amount of each of the active constituents of the drug. This is doubtless due not only to the method of separation, but also to the relative degree of purity in which the substances have been obtained. Thus the so-called senegin of Gehlen (1804), or the polygalic acid of Quevenne (1836) and Procter (1859), which is recognised by Flückiger as amorphous saponin, is stated by Christophsohn to be contained in senega to the amount of about 21 per cent., while other investigators have obtained as much as 5 per cent.; but the amount of this principle is probably not constant in the same drug. On the other hand, Christophsohn obtained from quillaia 8-82 per cent. of saponin, and Flückiger gives the amount of the latter as about 2 per cent. The further investigation of this subject, with the employment, as nearly as possible, of the same methods of isolation and purification, would seem quite desirable. In this connection it is also important to consider, as Kobert has shown, that pure saponin, C13H30O10, is perfectly destitute of physiological action, and that commercial saponin is mostly a mixture in varying proportions of four organic and some inorganie substances—namely, a substance for which the term saponin is retained, a carbohydrate lactosin, $C_{36}H_{62}O_{31}+H_2O$, discovered but a short time since by A. Meyer in the roots of various plants of the family of Caryophyllacea, together with two extremely poisonous substances -quillaic acid and sapotoxin—upon which the harsh taste and frothing property of commercial saponin depend. It would thus seem that the activity of quillaia, and probably also of senega, depends chiefly upon the two last-named proximate principles, and the estimation of these, rather than of the impure saponin, would probably indicate more exactly the therapeutic activity of the respective drugs.

From a pharmaceutical standpoint the absence of pectin bodies in quillaia renders the ordinary liquid preparations of this drug permanent and elegant, and the use of ammonia, as was recommended by Kennedy, in the preparation of the fluid extract and syrup of senega, and adopted by our Pharmacopæia, becomes entirely unnecessary. The following process affords as handsome a fluid extract as could be desired, and appears to thoroughly represent the activity of the crude drug. One hundred grammes of quillaia in No. 40 powder should be moistened with 40 grammes of dilute

alcohol, packed firmly in a cylindrical percolator, and enough dilute alcohol is subsequently added to saturate the powder and leave a stratum above it. It is then allowed to macerate for forty-eight hours, after which period percolation is allowed to proceed, with the use of dilute alcohol as the menstruum. The first nincty cubic centimetres of the percolate are reserved, and the remainder is evaporated at a gentle heat to the measure of ten cubic centimetres, and is added to the reserved portion. The finished fluid extract is of a deep reddish brown colour, and by simple admixture with syrup, in proportions corresponding to those of the U. S. P. syrup of senega—namely, 4 parts of fluid extract and syrup to make 25 parts—a perfectly transparent and handsome syrup of quillaia is obtained. The preparation with which experiments were instituted in Germany, as reported in the "Aerztl. Int. Blatt," 1885, No. 48, was a decoction made from 5 parts of the bark for adults, and 3 parts for children, with 180 parts of water and the addition of 10 parts of syrup, the dose being a tablespoonful every hour. The use of quillaia is stated to be contra-indicated in inflammation of the intestines or stomach, or in ulcerated states of the mucous membrancs.

Although a drug so long employed and so highly esteemed as scnega will doubtless still continue to retain its place in our materia medica, yet so admirable a substitute as quillaia would nevertheless appear to be well worthy of the attention of medical practitioners with a view to the adoption of suitable preparations of the same.

It may finally be incidentally stated that the cultivation of the quillaia has been undertaken in British India during the past year, and the plant, having resisted well the frosts of winter, has already attained a height of over six feet.

MR. EDMUND YATES tells a story of the late Dr. Wakley, who, it appears, was one of the habitués of the bals masqués which used to reign in the days of Julien and his band. On one occasion he appeared dressed as the devil—horns, tail, and other satanie accessories. Having met with a cheerful reception from almost everybody—for, Mr. Yates says, he was brimful of fun and animal spirits—he at last addressed a languid swell, who looked with infinite disgust on the giddy throng. "Who are you?" inquired the swell. "Can't you see? I'm the devil," said Wakley. "Then go to—your kingdom," replied the swell, and the doctor was not seen for the remainder of the evening.

THE BAT AND THE PESTLE.—An amusing incident occurred at a cricket match in a provincial town a month or two ago. The local team turned up one man short, while the visitors had brought twelve men in case of emergency. The captain of the visiting club, knowing that the twelfth man had not played for years—having been, in fact, a hard-worked chemist's assistant, and more familiar with the pestle than the bat, and the making of pills than with the leather—generously allowed him to play for the other side. To the amazement of the whole cleven the pale-faced "medicineman" hit up 43 not out, and won the match with flying colours.

THE REVENUE FROM PATENT MEDICINES.—The Board of Inland Revenue chuckle a good deal in their last published annual report about the growth of the revenue from patent mediciues. They observe that "the increase under the head of Patent Medicine Stamps is considerable, as usual, and shows how these medicines continue to gain in public favour." This may be a subject for congratulation by the Inland Revenue, but it may well be doubted how far the growing habit of the population to resort to these quack remedies is beneficial to the nation at large. Twenty years ago there were only 11,520 patent medicine vendors in the kingdom, and only 7½ millions of labels issued, yielding 60,000*l*. to the revenue. In ten years more—viz. in 1876—the vendors had increased to 15,022 and nearly 16 million labels were issued, yielding 123,000l. Now there are 20,279 vendors, and 211 millions of labels were issued during last year, yielding an income to the Government of 179,000l. Obviously, the efforts made to induce the Government to place the preparation and sale of patent medicines under better regulations are terribly handicapped by the supposed danger of losing this very profitable and growing source of revenue.—British Medical Journal

FRENCH PHARMACEUTICAL NEWS.

(From our Paris Correspondent.)

M. GUSTAVE PLANCHON has been officially confirmed as director of the Paris Superior School of Pharmaey for three years from November 1, in place of M. Chatin, admitted to the retired list.

M. Benjamin Raspail, a Deputy for the Seine department, and a son of Raspail, of camphor and sedative water notoriety, recently met with an accident. While at the Raspail pharmacy, Rue du Temple, he slipped on the floor and broke the rotular ligament of his right leg. He was taken home by his nephew, Dr. François Raspail. The accident, not serious in itself, is complicated by the fact that the patient has already had his left leg amputated.

DR. AUGUSTE FONTAINE, an inventor of some note, has been accidentally killed by an apparatus of his own designing. A few days since he was experimenting in his cellar, at the Rue de la Victoire, with a hydraulic engine of his invention, intended to produce compressed air. Unfortunately, while he was tightening one lever bolt another lever came down upon his chest with such violence as to crush it in. He soon expired.

THE TWO RIVAL FASTERS.—Paris now possesses two experienced fasters, both Italians. One, Succi, is already known to fame owing to his thirty days' performance at Milan. He came here a few days since with Dr. Borghini, the inspector of one of the Milan hospitals, who is to satisfy the Paris faculty that the conclusions arrived at by the Milanese committee were scientifically accurate. Succi has engaged rooms at No. 4 Rue Gluck, where he is going to begin his fasting feat as soon as he can obtain the formation of a suitable medical committee to superintend the performance. He has announced that during the experiment he will lend himself to all the scientific investigations required. Only he will not divulge the composition of the liquor, of his own invention, to which he attributes his former success in abstaining from all food. This he intends to sell at some future time as a patent medicine. Unfortunately for Succi and his nostrum, a rival has appeared in the person of Stefano Merlatti, a countryman of his, who announces he is going to fast fifty days without any sort of secret medicine. And, what is worse, Merlatti has already hegun his performance at the Grand Hôtel, since October 27, and is collecting the entrance fees while Succi is yet beating about Paris for his medical committee, and receiving no contributions from the good publie. At last accounts Succi was boasting of the feats of strength with which he is to astonish the physicians during the last days of his fast. On the other hand, Merlatti was reported to have suffered from nervousness and hallucinations during the seventh night of his experiment. To-day (November 3) the controlling medical committee will examine the patient and decide whether the fast may be continued or not without danger.

THE PARIS PHARMACEUTICAL SOCIETY.

THE regular monthly meeting of the Society was held on November 3 at the usual time and place. President Prunier occupied the chair; secretary Planchon came in a little later.

Professor Moissan first had the floor to speak of his experiments with fluorine. He detailed at length all the steps, unsuccessful at the beginning, which gradually led him to the isolation of fluorine. He said nothing particularly new or different from the reports already published in The Chemist and Druggist. The only thing really interesting about his communication was the exhibition of the apparatus which he used for his investigations in one of the college laboratories. Among them was a U-shaped platinum tube which has been employed nearly thirty times for producing fluorine. It shows scarcely a trace of corrosion, but the positive electrode, made of iridio-platinum, is worn down to a needle-point at the end which dips into the hydrofluoric acid. The Society tendered him a vote of thanks for the communication.

M. Marty read a paper on "Syrup of Bitter Orange-peel," written by M. Simon, a pharmacist-major at the Val-de-grace hospital. As an improvement on the Codex process, M. Simon recommends to exhaust the coarsely-ground orange-peel by percolation with alcohol and water in the cold. The alcohol, which in the finished preparation does not exceed 4 per cent., is to be added first; then, after twelve hours' maceration, the cold water is poured on, and enough percolate is collected to make with the sugar a syrup of proper thickness.

M. Crinon read a communication from an Italian pharmacist, informing him that at the Pharmaceutical Congress just held in Turin a resolution, presented by M. Vitali, had been adopted, protesting against the proposed abolition of military pharmacists in France, and tendering French pharmacists in general the assurance of their feeling of solidarity with them against this invasion of their rights. It was at first proposed to write to the Sceretary of the Congress a letter of thanks in the name of the Paris Society; but some members inclined to think that the interposition of foreigners in home concerns, although well meant, was not altogether desirable.

M. de Vrij made a further communication respecting his favourite topic. He offered a new test for sulphote of quinine, which, he said, he has discovered quite lately. It is based on the extremely sparing solubility of chromate of quinine, and is worked as follows:—

Take 1 gramme of sulphate of quinine and 100 grammes of water, and effect the solution by heating the water to ebullition; now add 24 centigrammes of pure neutral chromate of potassa dissolved in a little water, and after stirring with a glass rod set the liquor aside over night. The next day nearly all the quinine will be found precipitated in the shape of a crystalline salt, which contains no water of crystallisation and is easy to collect and estimate. To complete the description of the test M. de Vrij added that when he spoke of neutral chromate of potassa he meant the salt neutral, not to litmus paper, but to other reagents, as red litmus paper is turned blue by chromate of potassa, which is really neutral. He said also that, to come to a closer estimation of the quinine present, an allowance of 5 centigrammes of quinine chromate for each 100 grammes of mother-water was enough to ensure accuracy. According to his experiments chromate of quinine is one of the most insoluble compounds of the alkaloid, for chromate of potassa will form not only a cloud, but even a weighable precipitate, in the mother-waters from which the tartrate or the oxalate have been precipitated and separated.

At the close of the sitting the Secretary announced the death of M. Mialhe, a well-known pharmacist, who at one time held the presidential chair of the Society, and was still one of its honorary members.



The following applications for Patents have been registered at the Patent Office.

Aërated Drinks.—13,321.—October 19, 1886.—G. W. and L. G. Chinnery. Apparatus for making and supplying aërated drinks.

Alkaline Phosphates, &c.—13,173.—October 15, 1886.—A. Packard. Manufacture of compounds of bisulphate and biphosphate of the alkalics.

Aluminium Fluoride.— 13,654.— October 25, 1886.— L. Grabau. Manufacture of fluoride of aluminium and a double fluoride.

Aromatic Salts.—13,770.—October 27, 1886.—S. Travado. Oriental aromatic salts.

Azo Dyes.—13,780.—October 27, 1886.—C. D. Abel. Production of azo colours from orthosulpho or orthocarboacid of benzidine.

Bottles.—13,104.—October 14, 1886.—T. L. Switzer. Improvement in bottles for aërated waters ---13.234. October 16, 1886.—II. Barrett. Bottles for containing aërated liquids, and apparatus for such.

Boxes.—13,241.—October 18, 1886.—D. Rylands. Boxes for aerated or mineral water bottles.

Chlorine Furnace.—13,389.—October 20, 1886.—E. Solvay. A continuous furnace for the production of chlorine.

Feeding Bottles.—12,891.—October 9, 1886.—R. K. Boyle. Suction tube for feeding or other bottles.

Furniture Polish.—13,314.—October 19, 1886.—P. Wright. A French polish reviver.

Hand Grenades.—13,075.—October 13, 1886.—S. Norris. Improvements in hand-grenades and other vessels used for extinguishing fires, &c.

Magnesia Compounds.—13,762.—October 27, 1886.—W. Bramley and W. P. Cochranc. Manufacture of hydrated carbonate of magnesia and other products.

Malt Preparation.—13,758.—October 27, 1886.—J. and T. A. Marshall. Manufacture of a nutrient or digestive and medicinal substance from malt.

Vapour.—13,249.—October 18, 1886.—S. Thompson. Giving medicated vapour baths and applying medicated vapour locally.

Medicine Measures.—13,068.—October 13, 1886.—W. R Macauley. Improvements in medicine measures.

Naphthol.—12,908.—October 9, 1886.—G. Pitt. Manufacture of naphthol and naphtylamine-monosulphonic acids, and of dyestuffs therefrom.

Nitrogenated Water.—12,951.—October 12, 1886.—A. Brin and L. Q. Brin. Manufacture of nitrogenated water.

Neuralgia Cure.—13,318.—October 19, 1886.—D. F. Hamlink. A compound for the treatment of neuralgia.

Poison Guard.—12,810.—October 8, 1886.—W. Lane. Apparatus for indicating or marking chemical and other bottles, and so preventing the contents being used accidentally; also useful for securing stoppers.

Pyroxylin.—13,011.—October 12, 1886.—O. Imray. Process and apparatus for manufacture of pyroxylin.

Sodium Product.—13,001.—October 12, 1886.—J. I. Watts and W. A. Richards. A new sodium product and manufacture of same.

Stoppering Bottles.—12,985.—October 12, 1886.—J. E. Black.—13,044.—October 13, 1886.—E. Brokenslar. __13,062.—October 13, 1886.—S. F. Pichler. ——-13,092. —October 14, 1886.—A. and B. Travis.——13,147.— October 15, 1886.—J. Senior.—13,288.—October 19, October 10, 1880.—J. Senior.—10,200.—Cotober 19, 1886.— 1886.—W. H. R. Kelly.——13,319.—October 19, 1886.— R. B. Macnaughtan.—13,388.—October 20, 1886.—A. Horenburger and H. Benger.—13,491.—October 22, 1886.—W. Meeks.——13,541.—October 23, 1886.—A. C. Farrington.—13,673.—October 26, 1886.—F. Coe. 13,784.—October 27, 1886.—II. Bateman.—October 28, 1886.—J. Deeks and T. E. Harper. -13,857.

Sulphurous Acid.—13,286,—October 18, 1886.—A. Frank. Treatment of spent lyes (manufacture of cellulose) for the recovery of sulphurous acid and utilisation of said lyes after treatment.

Syphons.—13,082.—October 13, 1886.—E. Edwards. Improvements in.

Toe-nails.—12,813.—October 8, 1886.—J. Beauchamp. Cure of ingrowing toe-nails.

> Specifications recently published. (Postage, 1d. each extra.)

1885.

13,966. F. Mason. Stoppering bottles. 8d.

13,991. W. Taylor. Paste for dressing leather saddles. 4d.

13,993. W. Taylor. Compositions for dressing leathern harness. 4d.

14,002. A. G. Brookes. Acid bases for aërated, &c., beverages. 4d.

14,069. H. Codd. Bottles for aërated liquids. 8d.

14,128. J. B. Spence. Materials for making paint. 6d.

14,189. P. Jensen. Capsules for medicine. 6d.

12,035. G. G. Picking, and others. Vinegar. 6d.

14,003. A. G. Brookes. Laxative compounds. 4d.

14,158. J. Stow. Stopper for bottles. 8d.

14,251. H. W. Robinson, and others. Bottle and stopper for soda water, &c. 8d.

14,339. J. Edwards. Bottles for aërated liquids. 8d.

14,366. F. A. Bird and J. B. Fenby. Stoppering bottles. 64.

14,380. R. Ross. Soap. 4d.

14,407. W. McMillan. Combined hairbrush and comb. 6d.

14,428. L. Casper. Catheters. 6d.

13,108. J. Y. Johnson. Extracting sulphur from materials employed in the purification of gas, &c. 6d.

13,462. J. B. Spence. Sulphide of zinc. 4d.

14,697. H. Pischon. Preserving alimentary substances. 8d.

14,755. W. Samson. Automatic stopper for bottles, &c. 8d.

14,990. E. Kent. Bottle for lotions, &c. 6d.

15,168. F. Keeling. Finings for the clarification of beers and wines. 4d.

15,514. M. Gray. Combined soap dish, sponge tray, and brush tray. 6d.

1886.

354. W. Jowett. Absorbent wadding. 4d.

2,516. T. II. Rushton. Syphons, &c. 8d.

4,746. J. L. Crawford and R. Lees. Inhalors for curative purposes. 6d.

6,069. S. A. W. Howmann. Compressed yeast. 6d.

6,892. F. W. Pittuck and J. C. Snowdon. Stopper fastencr for poison bottles. 6d.

9,678. J. J. R. Patrick. Artificial teeth. 6d.

Extracting paraffin from petroleum 9,867. J. T. King. distillate. 11d.

10,009. H. H. Lake. Chlorine gas. 6d.

10,605. W. R. Lake. Extracting aluminium from chlorides of the same, &c.

10,011. H. H. Lake. Chloride of aluminium. 4d. 10,013. H. H. Lake. Chloride of aluminium, &c. 6d.

10,280. J. Y. Johnson. Oxychinoline carbonates. 4d.

10,351. F. West and F. B. Armstrong. Stoppering bottles. 8d.

10,606. W. R. Lake. Extracting aluminium from its chlorides. 40.

10,607. W. R. Lake. Electro-deposition of aluminium. 4d.

The following Patents have become void through non-payment of renewal fees.

3,257. A. T. King. Internal stoppers for bottles.

3,395. J. P. Rickman and another. Ammonia.

3,311. J. C. Mewburn. Disinfecting hides, &c.

3,342. F. Wirth. Alkali salts from sulpho acids.

3,359, J. Van den Bergh. Artificial cream.

3,063. J. Jensen. Manufacture of yeast and vinegar.

2,860. S. Pitt. Production of hydro-carbons.

3,135. L. Hoff. Treating malt extract, &c.

3,186. W. Weldon. Recovery of sulphur from alkali waste.

3,214. J. Coates. Sulphate of ammonia.

3,234. O. G. Abbott. Bottles, &c.

3,417. J. C. Cook. Mineral water bottles and their stoppers.

3,453. J. Lane. A beverage.

2,910. J. H. Johnson. Capsules.

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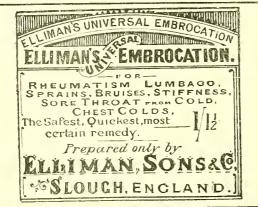
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DITORIAL

THE CURRICULUM SCHEME REVIVED.

CHEMISTS will be somewhat surprised to find that the weary discussion of the curriculum scheme is upon them again. We are well aware of the value in history of those men who "never know when they are beaten." They are the men, as we have been so often told, who "have made England what she is." But those people are terribly unpractical, and any large proportion of them would soon bring the world's business to a standstill. Mr. Schacht represents this class on the Pharmaceutical Council. One can but admire his persistence, but with all respect for his earnestness and his abilities we cannot help regretting that he should so regularly devote them to the promulgation of visionary ideas. The curriculum scheme has been dissipated into ether; to reembody it is a wanton waste of costly time. Passed it would make no practical difference to the conditions of pharmacy in this country; and good, bad, or indifferent, there is no reasonable chance of the scheme being sanctioned by any probable British Parliament. Mr. Schacht's object in advocating it is that he thinks it would promote the pharmaceutical science; he honestly believes that improved methods of teaching materia medica would bring the world sensibly nearer to the millennium. Unfortunately the British Parliament cares for none of these things, the Privy Council want to secure for the public more protection from accidental poisoning with as little interference with free trade as possible, and the Philistines of Westminster would never detect the fine logic by which Mr. Schacht would prove that his curriculum scheme would promote that end. The Pharmacy Act wants amending, certainly; but to put a curriculum forward as the cheral de bataille would be to recklessly throw away any chance of practical legislation which may occur.

AUSTRALASIAN PHARMACEUTICAL CONFERENCE.

THE long-anticipated conference of pharmacists representing the various Australasian colonies was to have beenheld in Melbourne on October 27, 28, and 29 last. We have not yet heard whether it actually took place, but of this there could not have been much uncertainty. The nature of the Conference will be best gathered from the suggested programme of business, which in the early part of September was drawn up as follows:-

FIRST DAY, WEDNESDAY, OCTOBER 27.

The business of the first Intercolonial Pharmaceutical Conference will commence on Wednesday, October 27, at ten o'elock A.M., at the College of Pharmacy, Swanston Street, Melbourne, when an address of welcome will open the proceedings.

Calling of Delegates.

The names of the delegates having been called, the meeting will proceed to the election of a president and secretary.

Order of Business.

First Resolution.—That a uniform system of education throughout Australasia is desirable, such system to em-

(a) Preliminary examination, to include the same subjects

as required by the Pharmaceutical Society of Great Britain.

- (b) Apprenticeship of four years.
- (c) Course of study, based upon the course adopted by the Pharmaceutical Society of Great Britain. [!]
- (d) Examinations to be conducted by examiners appointed by boards, councils, or governing body.
 - 1. The mode of conducting examinations to be both written and oral in every subject.
 - 2. The subjects of examinations to embrace :-

Botany... ... To be conducted as far as Materia Medica ... Practical Medica ... Practical pharmacy, as conducted in Victoria.

SECOND DAY, THURSDAY, OCTOBER 28.

Second Resolution.—The desirability of uniformity in Australasian pharmaceutical legislation.

In order to facilitate the discussion of this subject, it is strongly urged that the delegates from each colony should be furnished with copies of the Acts in force, or proposed to be enacted in their respective colonies.

Third Resolution.—Uniformity in the laws relating to the sale and use of poisons, and the regulations for their custody. It is also suggested as in the previous clause.

THIRD DAY, FRIDAY, OCTOBER 29.

Fourth Resolution.—Interchange of Certificates.

That on adopting and giving effect to Resolution I., the examination certificates shall be recognised by the governing bodies of the various colonies.

Fifth Resolution.—That the rapid increase in the trade of proprietary medicines and secret nostrums is antagonistic to the true interests of pharmacy.

When this programme was drawn up there were difficulties respecting the appointment of delegates from some of the colonies, and it did not appear that any of them would have anything like plenary powers. Queensland, Western Australia, and Fiji were not expected to be represented. New South Wales would only attend if two-thirds of the colonies were represented. South Australia had appointed a gentleman, now residing in Victoria, and it was doubted whether such an appointment could be valid. With these initial difficulties in view, it is evident that there is not much chance of accomplishing any definite results on this occasion; but something will have been done by getting an imperfect gathering and an informal discussion, and this was penhaps as much as the promoters of the Conference really expected at their first attempt.

OUR B.P. CORRECTIONS CORRECTED.

MR. FROUDE, in a letter to the Times, begs for merey from the critics who have so cruelly mauled him ever since, in the exercise of what he calls his "discretion," he published the "Reminiscences of Carlyle." Writing on the same date as Mr. Froude, but in a very different spirit, Professor Attfield again faces the critics of the last edition of the "British Pharmacopeeia," for which, as is well known, he is largely responsible. With a healthy vigour which promises well for future editions of the Pharmacopæia, Dr. Attfield addresses himself to the great mass of three hundred and three corrections which our correspondents had so laboriously piled up. To correct a work which had already been officially corrected was perhaps somewhat audacious, and when it is remembered that the award of the guineas depended to some extent on the minuteness of the labour, it is not wonderful that a very large proportion of the "corrections" pointed out should be, as we perfectly agree they are, merely trivial. But we confess to have thought this a fairly complete and not quite useless compilation, as it brought together most, if not all, the improvements, clerical and otherwise, which have been suggested since the publication of the Pharmacopacia, and some which had not been before noticed. All these when tabulated present a formidable appearance, but we ourselves stated last week the list contained comparatively few corrections of serious errors. A very large number were mcrely suggested improvements on the cross references or sub-sections. Such comments were not objections; the suggestions may have been in many cases worthless, but, such as they were, they were interesting. Professor Attfield's letter, we admit, casts a light on our list which somewhat reduces the first impression created; but investigators should not be charmed into inactivity by the roseate hue with which he illumines the official view. Regarded as solemn corrections, it must be agreed that the first dozen of our twenty-five dozens come out of the Attfield crucible rather poorly. The last dozen, we think, would have fared better. We find among these Oleatum zince, a new preparation of zinc in which the oxide is used, and yet it is not found where precedent would place it, viz., under Zinci oxidum. Similarly, Calamina praparata and its ointment, also innovations so far as the present Pharmacopæia is concerned, are not included amongst preparations containing zinc; and Aqua laurocerasi is really required to complete the supplemented 1867 list which is printed in the 1885 Pharmacopæia, under volumetric solution of nitrate of silver. A similar remark applies to the aromatic spirit of ammonia in both the references to it which occur in the last dozen "corrections." Then, as regards Acidum lacticum dilutum, Professor Attfield will not deny that the correction refers to a serious error. The next four, referring to the proposal to admit certain additions into the Pharmacopolial table of the elements, may be elassed amongst the trivialities of the list, and the last simply points out an omission in the index. We did not ask our compilers why they sent in certain "corrections;" our duty was only to see that they eonformed with precedent, or, in other words, with the practice followed in the majority of cases in the Pharmaeopœia. We shall now be glad to hear what others have to say on the subject. We do not follow Professor Attfield in his argument regarding the additions showing the strength of the preparations. The strength is given in most eases why not in all? Very little more space would be occupied, and the cost would be the same. But we perfectly agree that it is worthy of consideration whether these and other cross references should be retained at all, and this appears to be a good opportunity for discussing that question from a pharmacist's point of view. That our 303 list did not exhaust all the possibilities of the subject is proved by Mr. Stewart's letter, which follows Dr. Attfield's. The fluid part of a No. 20 powder which is prescribed under "inf. senega" will hardly secure a champion among the most gallant defenders of the 1885 Pharmacopæia.

EXPORT TRADE AND THE SPIRIT DUTIES.

THE letter which Mr. Maddock has sent us, indicating a special difficulty which presents itself to a small maker of perfumery in cultivating an export trade, touches the hem of a very important subject. Mr. Maddock had a chance of selling 50% worth of lavender-water to Australia if he could ship this in bond. He found this chance was practically prohibited to him, and he has lost the order, which will probably go to swell the business of larger manufacturers.

The manufacture of perfumery in bond is carried on in this manner. On the wharfs are certain warehouses, which are let out by their owners to makers of goods in which spirit or other taxed goods are stored. Some of these warehouses are let out in "floors" to makers of perfumery whose business is big enough to allow them to rent such a floor. On the application of the warehouse owner, the Board of Customs may, if they think fit, sanction the manufacture of perfumery for export on such a floor under certain conditions, one of which is that the whole of the processes are supervised by a Revenue officer. Without such a concession the British trade in perfumery would be entirely hopeless. At present it is in the hands of a comparatively few houses, and, as we have seen, it is very difficult for new men to get a chance to share in it. If, however, there should be a sufficient demand for the opportunity, it is quite likely that one of the warehouse owners would be found willing to set apart a room for occasional occupation, and, on proper representation, the Revenue authorities would not be at all unlikely to sanction the employment of such a room for the purpose suggested.

This point raises another, which has often been mentioned in the drug trade, but which has never yet been seriously taken in hand as it deserves to be. It is an undoubted fact that the export trade in tinctures and other spirituous medicines is entirely lost to this country for no other reason than that the difficulty of manufacturing them in bond is really or apparently insurmountable. There is no such manufacture at present sanctioned by the Customs, and we believe that a memorandum exists expressly disallowing it. It is not, however, the tendency of any British Government to maintain regulations which shall purposelessly check trade. The wholesale drug trade of England might have this business as easily as Germany has obtained it if they would only ascertain the initial difficulties, and combine to overcome them. Whether this could be best done by a sort of co-operative factory in bond, or by inducing the Government to allow a drawback, as is done in the case of snuff, manufactured tobaccos, and other taxed articles, is a question for practical men to decide. But it is little short of a disgrace that the drug trade of this country should so tamely allow itself to be beaten in a competition which, if it is not a great thing itself, is associated with a business which is quite good enough to keep, and which, as London is the drug mart of the world, ought to be a British speciality.

THE FALL IN IODINE.

ALTHOUGH rumours had been current for several months that an alteration was about to take place in the price of iodine, the announcement of the actual reduction from 9d. to 7d. eame as a surprise upon the trade. The reduction is partly due to the depressed condition of the article, and partly because the combination of Chilian producers wanted to cut out some producers outside their association, who were underselling them when their price was 9d. The combination in question terminates at the end of the present year, and it has not as yet been decided whether it shall be eontinued; the prospects of the article are therefore extremely uncertain. The demand for iodine and its preparations is a limited one; at different times experiments have been made to employ it in steel manufacture, in dyeing, &c., but all these trials, which would, if successful, have enormously increased the demand, have led to no permanent result, and the article is at present mainly used in pharmacy and photography. The use of iodoform is largely on the increase, but otherwise the consumption shows very little improvement, certainly not as much as might have been expected from the large reduction in price which has taken place within late years. The

Chilian iodine has never been used for dyeing purposes; at the time when iodine was so employed it was exclusively derived from the kelp which is thrown up on the Scotch and Irish, and to a smaller extent on the French and Norwegian, coasts. At present, however, the market is dominated by iodine derived from the sodium iodate, found associated with nitraté of soda in the Chilian deposits of nitre. The Chilian producers of soda nitrate have a combination of their own for the latter article, and also an entirely distinct combination for iodine, which is not, we understand, produced by all of them, as it is not a constituent of all the Chilian nitres. There have been a good many combinations of the Chilian manufacturers. Some spasmodic attempts at forming a "ring" were made prior to 1863, but in that year the first effective combination was organised by the chief of a large Scotch chemical firm, and this combination has, with certain intervals, been kept going until now, doubtless with a very satisfactory result to those connected with it, and eertainly to the greater steadiness of the market. Iodine is at present met with in a very purc condition as a rule, but when the first consignments arrived in jars from Chili in 1868, it was highly charged with impurities, and often contained only 15 or 20 per cent. of the pure article. An attempt was afterwards made to forward the "mother liquor" to Europe and refine it here, but this was not found to pay. A fall in the price generally causes an increase in business for some time, as speculators take up the article, and as a matter of fact there are still parcels of iodine held by London speculators, who having bought at 4d. some years ago have let their chance slip to realise at 9d., although they now seem anxious enough to sell at the reduced market price. The Chilian iodine is shipped principally to London, Hamburg, and New York, the London market being the leading one. The export of crude iodine from Chilian ports was: - In 1885, to Europe, 170,841 kilos.; to the United States, 30,534. The headquarters of the Association are at Glasgow, but, so far as we know, no iodine is shipped to that port.

CHEMISTS' DISPENSING.

THE unfair summary of Messrs. Seaton & Helmer's analysis of prescriptions published in the recently issued report of the Local Government Board has served, as we anticipated it would serve, as a convenient peg for the sensation-loving journalist, both London and provincial. The startling statement that seventeen times out of fifty, mistakes are made in dispensing prescriptions has been made the most of. In numerous papers we find letters from ehemists putting the saddle on the right horse, and taking the opportunity of placing stores and doctors' shops in the unsatisfactory light which Mr. Hehner's report actually east upon them. One of the smartest of these letters is signed by Mr. Edward Smith, local secretary of the Pharmaceutical Society at Torquay, and that gentleman, we are bound to say, makes the Local Government Board's report a bad second in point of skilful unfairness. Mr. Smith undertakes to explain the analysis, and in pursuance of that intention he tells his Torquay readers that there are in London four types of shops where prescriptions are compounded or dispensed. These are the shops of (1) pharmaceutical chemists, (2) ehemists and druggists, (3) co-operative stores and drug companies, and (4) doctors' shops and medical dispensaries. Of these, he says, "it does not appear that pharmaceutical chemists [quorum pars sum] made any error; " ehemists and druggists went wrong to the extent of 7 per cent., co-operative stores and drug companies are credited with 33 per cent. of error, and doctors' shops with 50 per eent. of error. Messrs. Seaton & Hehner explained that they had thirty prescriptions

made up at chemists' and druggists' shops of all kinds; it was smart but hardly fair to crib a compliment, as Mr. Smith has done, for the Pharmaceutical Society from this report. Nor can it be regarded as scrupulously just to group cooperative stores and drug companies together. Messrs. Hehner & Seaton found three errors out of fourteen prescriptions dispensed at the former, and three errors out of four prescriptions dispensed at the latter. What they meant exactly by "drug companies" we do not know, but evidently they distinguished them from co-operative stores. Mr. Smith, by grouping the two, makes co-operative stores look about twice as bad as they were. Lastly, Mr. Smith notes very properly that "everything is assumed against the dispenser; nothing is put down to possible and probable error of analytical manipulation, and nothing to the practically infinitesimal impurities which such alkaloids may contain, and which it is quite beyond the power of the dispenser or anybody else to prevent." But he is hardly fair to the analyst in the next sentence, in which he says, "The method employed by the analysts to 'prove' atropine to be genuine is not any exact chemical process, but merely by observing its well-known action on the pupil of the eye, a method that certainly will not indicate the difference between 1.8 and 2 grains." It will be observed that the analyst did not say he tested the atropine qualitatively by this method.

Mr. Smith's argument and quotations lead him to a very effective peroration with which we heartily agree:—

"The only conclusion to be drawn from this report," he says, "is that the public may rely upon their prescriptions being accurately compounded by the many well-trained pharmacists to be found in every town; but they must take their chance if they prefer less trustworthy establishments. Those who best know what accurate dispensing involves give a wide berth—a very wide berth indeed—to stores, drug companies, and such like, being fully persuaded that the saving of a few pence on a bottle of medicine is in no way commensurate with the risks to health and life entailed thereby."

OPIUM AND ITS EXTRACT—A SYMPOSIUM.

In our issue of October 23 there appeared a letter from a correspondent asking help out of a difficulty which he had experienced in making extract of opium from an ordinary commercial sample. He found that the extract which he obtained yielded 29.4 per cent. of morphine. It may be explained that our correspondent is a retail pharmacist, who buys in what he considers to be the best market and pays the best price for his drugs. This practice is in other cases commendable, but in the case of opium it is not the price of the drug but its alkaloidal value and extractive content which must control the purchase. Our correspondent's difficulty was, however, a matter of sufficient importance to call for a consensus of opinion from those who have large practical experience in the subject, and in response to our request we have before us a number of communications, the gist of which we now present for consideration, with the object of removing any difficulties which may exist, and, if necessary, to modify the present pharmacopæial standard when the time arrives.

The controversy on this subject was really initiated by Mr. Umney a year ago, when he pointed out that it was impossible to take opium in powder of 10-per-cent. morphine content and prepare from it an extract containing 20 per cent. of morphine, because the extract assumed a perfectly brittle consistence when it reached a strength between 16 and 17 per cent. At the same time he questioned the wisdom of fixing the alkaloidal value of the drug at so low a standard, and in this as well as the extract question was sup-

ported by various authorities, including Messrs. Wink and Moss. The Pharmacopoxia authorities took Mr. Umney's advice and changed the direction "opium in powder" to "opium," thereby providing for the extract being evaporated to half the weight of the drug used. To this matter we may, in the first instance, confine our remarks, and upon it the majority of our correspondents give a very decided reply.

Mr. Umney, who suggested the alteration in the Pharmacopœia, finds that 100 parts of Smyrna opium of commerce affords an average yield of extract equal to 54 per cent., and this extract when standardised to 20 per cent. of morphine is of a suitable consistence.

Mr. Hermann Woolley's average results, taken from the laboratory note-book of his firm, show that 100 lbs. of soft opium, containing in its moist state 105 per cent. of morphine, yield 50 lbs. of extract containing 20·3 per cent. of morphine, and 37 lbs. of dried mare containing nearly 1 per cent. of morphine. The consistence of the extract was too soft for forming pills without further treatment. Mr. II. W. Jones, in the course of a note on the subject, gives the following results of twelve samples of opium assayed by him, and the value of the extract prepared from two of them, viz.:—

1	 	 13.6	7	 	 11.0
2	 	 12.8	. 8	 	 10.9
3	 	 12-7	9	 	 10.7
4	 	 11.8	10	 	 106
5	 	 11.5	11	 	 10.4
6	 	 11-4	12	 	 10.0
			 	 N. T	

Sample = 10.4 per cent. gave an extract containing 22.1 per cent. morphine
,, 10.0 ,, , , , 19.3 ,, ,

"It would have been an easy matter therefore, by mixing the two extracts, or taking a mixture of the two kinds of opium, to have obtained a strictly B.P. product."

Another correspondent writes:—"It is only possible to get an extract of B.P. strength by assaying the opium both for morphine and for extract. Ordinary samples yield extract containing 20 to 23 per cent. morphine. If your correspondent's extract contains 29.4 per cent. morphine, the opium was not an ordinary, but an extraordinary, commercial sample. 'Opium's' best plan would be to make another batch of extract (as weak as possible) and mix the two."

So far these replies might be taken to be favourable to the Pharmacopæia method, provided care is taken in the selection of the opium; but it will be observed that the opiums spoken of are not, strictly speaking, pharmacopeial opium—they are opium of commerce, containing 10 per cent. or upwards of alkaloid. The official article contains only about 8½ per cent. of morphine in the moist state, and if such opium were to yield a proper extract it should contain no more than 42.5 per cent. of soluble matter, an abnormally low amount. It was this that Mr. Moss referred to in an article communicated to this Journal last April, his experience being that an extract containing only from 16 to 17 per cent. of morphine is obtained from pharmacopæial opium. It is a matter of extreme difficulty indeed to get samples of the drug which will afford an official extract. This point is well illustrated in the following note by a manufacturer:

"Our custom is," he remarks, "to lay aside, when we come across opium that will answer the purpose, all that is required; and it is only possible for parties who pass large quantities of opium through their hands to meet the B.P. requirements. As opiums of all kinds have been under my notice, the yields of extract have sometimes been very great, as well as under the 50 per cent. expected by the B.P."

Mr. J. E. Saul practically supports Mr. Moss. He states that his yield of extract from commercial opium is about 55 per cent. He does not agree with "Opium's" statement that it is easy to obtain extract assaying 20 per cent. of morphine by employing official 10 per cent. opium (in the dried state). The facility with which extract may be made

from commercial opiums is also referred to by Dr. Inglis Clark. "Our experience," he says, "has been that, as stated by your correspondent, we obtained equivalent to about 30 per cent. alkaloid, but we have not hitherto found any difficulty in adding such amount of water as would reduce the extract to a suitable consistence, and at the same time make it contain the standard amount of alkaloid." Similarly Mr. W. A. II. Naylor's experience reflects the custom of the trade. He says:—

"We simply select samples of opium of varying morphia values, and mix them together in such proportion that on exhaustion with water to 50 per cent. yield of extracts their united product will contain about the equivalent of 20 per cent. of morphia. I say about, for, having regard to the conditions of the production of this B.P. article, we should consider that a percentage of morphia above or below the authoritative standard fell reasonably within the prescribed requirements. I am of opinion that if it be desirable, and if the Medical Council feel it necessary, to provide in the British Pharmacopæia for a preparation of opium of standard morphia strength, prepared by a process of aqueous extraction, it should take the form of a dry and powdered extract. The production of such an article could be effected without injury to the chief principle concerned. The addition, in requisite quantity, of some harmless diluents, as liquorice-powder or milk-sugar, would serve to reduce it to the exact standard percentage. As such the extract would be convenient for dispensing, definite in respect of its morphia constituents, and capable of storage without undergoing sensible alterations in strength.'

In no case, it will be observed, does any manufacturer start with an opium such as the Pharmacopæia prescribes; and if they are to act according to the spirit of the official dictum, there must be a constant watch for samples of about 10 per cent, which are suitable for extract making. This is the serious part of the matter, for it is obvious that the retail pharmacist is placed in a very awkward position if he desires to make his own preparations. Few have the opportunity which one correspondent mentions of picking from a number of chests what may be suitable for the purpose. Of course wholesale houses might pick out such samples for their customers, but again there comes in the difficulty that, to obtain a sufficient supply for all purposes, resort must be had to a species of opium which passes through a "factory" at the port of shipment. This "factory" article varies greatly in the amount of extractive which it contains, just as it varies in alkaloid from nil to 10 per cent. On the other hand there is an abundant supply of opium—the bulk, in fact, of what comes into our markets-which contains in the moist state over 10 per cent. average about 12 per cent. of morphine, and extractive matter rarely less than 55 per cent., and generally amounting to 60 per cent. This is genuine opium; the factory article is not, and contains much added material. It was to this richer opium that Mr. Wink referred in the discussion which followed the reading of Mr. Umney's paper last November, and he advocated that it only should be used for medicinal purposes. Mr. Wink has favoured us with some analyses of such opiums from his purchase-book. All these opiums were imported direct from Salonica and other pharmacopæially prohibited districts. Altogether, the analyses represent 106 cases of undried opium. The results are as follows :-

Lots		Cases		Morphine Yield
1	 	1	 	10 to 11 per cent.
3	 	8	 	11 ,, 12 ,,
4	 	44	 	12 ,, 13 ,,
6	 	45	 	13 ,, 14 ,,
2	 	9	 	14 ,, 15 ,,
1	 	3	 	15 ., 16 ,,

It will be noticed that Mr. Jones's figures also show that opiums between 10 and 11 per cent. are in a minority, and it may be explained that the richer opiums are reserved for the

manufacture of alkaloid. Our inquiry has elicited the important fact, well known in wholesale circles, regarding Asia Minor opium, namely, that the bulk of it is imported from the districts which yield the superior drug, and is then brought down to the standards which are in force in various countries, including the United Kingdom. We have also ascertained that these rich opiums, containing 12 per cent. or thereby of morphine, yield without difficulty extracts which contain only 10 per cent. or thereby of morphine, the reason being that they are rich in extractive, and as variation in alkaloid is accompanied in most cases with a proportional variation in extractive it is easy to mix samples so as to give the desired result. This reopens the question regarding the pharmacopeial standard. It seems a very reasonable thing to fix upon so convenient a standard as 10 per cent. for dried opium, and double that strength for extract. But, as has been stated, there is very little genuine opium which corresponds with the requirement. On this point a contributor says :-

"The B.P. standard is simply a premium upon adulteration, and a source of trouble and annoyance to pharmacists. I venture to think that the cause of the trouble is due to an impression that formerly obtained respecting the percentage of morphia contained in opium. This was due, in a great measure, to the method of assay given in the Pharmacopæia of 1867, and to other methods formerly in use for the estimation of morphia. Much of the alkaloid was lost in these processes, so much so that 10 per cent. came to be considered a fairly high standard. All this is now altered by the present official process, which extracts the whole of the morphia and yields it in a pure crystalline form."

The fact mentioned by this correspondent has, no doubt, its influence, but there is another to be considered, viz., that opium has considerably improved in quality during the last twenty years. This does not appear to have been taken into account by the Pharmacopæia authorities—they rather went upon the records of the twenty years in question, some of which unfortunately were made about the beginning of the period, when the drug was at its worst stage. Our present inquiry conclusively shows that (1) it is the exception rather than the rule to find a 10 per cent. opium—that is, $8\frac{1}{2}$ per cent. in the undried state-capable of yielding a proper extract. (2) That opiums containing from 10 to 12 per cent. of morphine in the undried state are quite common; these are the genuine drug, and the extractive matter in them appears to correspond with the alkaloidal content, so that there is no difficulty in preparing from them official extract of opium. (3) It is desirable that the Pharmacopæia standard should be raised in order to exclude samples which are notoriously "made-up," and which are so variable as to moisture and insoluble matter that it is seldom that they are fit for drying.

It is not so many years ago since 1,000 leeches was a common item in druggist's orders to Treatment. whole ale houses. How many now order 50? We may be thankful that therapeutics have changed for the better, and that progress is still being made. A correspondent of the British Medical Journal gives an illustration of the extreme measures which were in use fifty years ago, the account of the case being taken from a letter written at the time. The patient was a young lady aged twenty years, who, it appears, had been suffering from an attack of congestion of the lungs. The letter states that "In the night (of Thursday) some pain came on in the right side, and we sent immediately for Dr. R., who had her bled on his arrival, till she fainted. This was again repeated in the evening. On Sunday thirty leeches were applied, and a blister on Monday; antimony, calomel, and digitalis being taken all the time. Some relief was obtained.... As the shortness of breath, &c, continued, we sent yesterday (May 29, 1830) for Dr. R. On his arrival, he appeared to think very badly of the case, stating that the only hope was in reducing the system to the greatest extent possible. He accordingly bled her till convulsions were produced, and she appeared to me dying. Another blister was laid on the chest, and the doses of medicine increased in strength, while every kind of nourishment, except occasionally a few spoonfuls of barley-water or gruel, was forbidden. . . . Dr. R. gives us strong hopes of recovery . . . but says he has no doubt that if she were to drink freely of barley-water through one day, the disease would return as violently as ever." Wonderful to relate, the lady recovered, and lived to attain the age of seventy-four.

* *

We recently referred to the experiments which Sorghum have been going on in the United States during Sugar the last deeade in the cultivation of sorghum for the manufacture of sugar. From late advices we learn that a company has been formed with a capital of 35,000l., exclusive of a grant in aid of 10,000%, by the Government, This company has acquired a large tract of land near Fort Scott, Kan., upon which an excellently-equipped sugar factory has been built, and is now in working order. The sorghum when it reaches the factory is delivered upon a large platform, over which runs an endless band, conveying the stalks to a carrier saw, which clips off the heads. The cane passes into a shute leading to three sets of cutters, which chop it up into pieces of an ineh long. Each of these three cuts 7 tons per hour. The leaves are taken out by a blower, while the chips go to the diffusion tanks. Here the cane is lixiviated with warm water. The liquor is then drawn off and the process repeated until the cane is exhausted, as many as thirteen waters. The solution is introduced into carbonators, and treated with one and one-fourth its weight of milk of lime, which is then precipitated as carbonate, which, as it precipitates, carries with it the bulk of the colouring matter. After carbonation the juice is pumped through a filter press, and is then passed on to the sulphurising tanks, where it is charged with sulphurous acid gas, which renders the juice clear and bright. It is again run through the filter, going thence into the vacuum evaporators, from which it is afterwards removed for crystallising. The factory turns out 10,000 lbs. of sugar and 2,000 gallons of syrup daily.

* *

A very pretty test for this new hypnotic is pro-Test for posed by M. Jacquemin in a note communicated Urethane. by M. Berthelot to the Académie des Sciences. An aqueous solution of urethane (4 grains to 1 ounce) may be used. To a little of this in a test-tube add an equal bulk of mercuric chloride solution, then, drop by drop, solution of potash or soda. The first drops have no effect, but by-and-by a white gelatinous precipitate is formed, and when a certain point is reached the contents of the test-tube become quite gelatinous when shaken up, the appearance of the viscous mixture resembling starch or tragacanth mucilage. If this be boiled the precipitate dissolves almost to a clear liquid, but on cooling becomes milk white, the precipitate very slowly settling to the bottom. If the test be reversed, the potash being added to the urethane solution first but not in excess, the mercuric chloride has no effect; if, however, more alkali be now added, the same result as before is experienced. If alkali be added in excess in the first instance, then mercuric chloride, a yellow precipitate of mercuric oxide, forms and is at first redissolved, but as the mercuric solution continues to be added the precipitate becomes permanent and the solution viscous. These tests are very interesting and well worth trial. As to the delicacy of the test, it is stated (Brit. Med. Journ.) that urethane was precipitated by mercuric salts in the proportion of 1.50 per 1,000. In order to detect urethane in weaker solutions, such as 00005 gramme per cubic centimetre, potash was added, and bichloride of mercury drop by drop. A yellow precipitate gradually formed, and again dissolved so long as urethan remained. The test has an application in detecting urethane in urine. Nitrate of mercury and acetate of mercury acted on urethane, in the presence of potash, like the perchloride. These two salts precipitated urea, but precipitated urethane only in the presence of potash. Normal urine, much diluted and treated with the mercuric salt, deposited a white precipitate, which became black on boiling. In order to extract urethane from urine, it is treated with ether, and then washed several times with water; the residue from the evaporation of ether was dissolved in very little water, and treated as described. We may state that annuonia does not give the reaction, as it forms ammonio-chloride of mercury in every case. Potash and soda are, however, effective. These alkalies split up urethane into ammonia, carbonic acid gas, and alcohol, whereas ammonia decomposes it into alcohol and carbamide.

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Short Papers. The Oldham Chemists' Assistants' and Apprentices Association, which appears to have a backbone of its own, adopted last week an excellent means of promoting pharmaceutical knowledge among its members, and keeping up interest in its proceedings. The plan was to arrange for half-a-dozen papers on pharmaceutical topies, none to occupy more than five or ten minutes in the delivery. For this scheme novel subjects are not desirable. Each reader works up a topic and writes out his results. If he conveys no information to his audience, he will be certain to have acquired some himself, and he cannot very well be tedions. Perhaps, best of all, he learns the art of condensing himself, and if he masters that art he will be a favourite, at any rate with editors.

* *

The Price of Analysis. At the Hampshire Michaelmas Sessions last week, a long discussion took place on various proposals in regard to the appointment of analysts. One gentleman had given notice of the motion-"That Mr. Arthur Angell and Mr. Otto Hehner, whose present appointments as public analysts for the county have expired, be appointed to that office for three years, the remuneration to be paid to the analysts to be 6s. for each analysis made in the performance of their duties as county analysts, and 21.2s. for each quarterly report to the committee." This was withdrawn, however, as Mr. Hehner had intimated that he would not accept the appointment at a fee of 6s. per analysis. Lord Mount Temple had given notice of a motion that Mr. Otto Hehner be appointed analyst for the whole county at a fee of 7s. 6d. per analysis, and 10l. 10s. per year for his four quarterly reports. Lord Mount Temple complained that on Mr. Angell's certificates out of 195 prosecutions the defendants had been discharged in 43 cases. Under Mr. Hehner's certificates 35 prosecutions had taken place, with 32 convictions. would not, however, move his amendment, as they wished to be economical, and out of regard for economy and looking at Mr. Angell's testimonials, he ultimately proposed him. Mr. Esdaile then moved an amendment that the two analysts be reappointed to the same district, and on the same terms as before, and in a long speech defended Mr. Angell. This motion was agreed to. The terms of the appointment were 10s. 6d. for each analysis, the court guaranteeing to order sufficient to produce 100 guineas yearly.

* *

The Traffic The Local Government Board have lately issued circulars in regard to a closer supervision of in Milk. the milk trade by local inspectors. The Contagious Diseases (Animals) Act of last session transferred from the Privy Council to the Local Government Board certain powers in reference to dairies, milk-shops, and purveyors of milk. The principal ground for this transference was the discovery that a disease resembling scarlatina had been found to be communicable from cows to human subjects. Circulars have therefore been issued to local sanitary authorities, requesting that the attention of inspectors shall be directed to the danger, and asking for reports. Sooner or later the milk trade will have to be brought under effectual control. Besides this newly observed disease, evidence of spread of typhoid fever by the aid of the milk supply has been repeatedly brought forward. The typhoid germs are supposed to be conveyed only by contaminated water, and the water, it always turns out, can only get in the milk through a few drops being left in the cans when these are washed. However that may be, it is reasonable to suppose that measures might be taken which, by providing special precautions, would often prevent such a calamity as the wholesale poisoning of hundreds of victims which has several times resulted from a too free trade in milk.

Among the legal cases of the past week was one of special interest to advertisers. The pro-Advertiseprietors of a paper ealled England sued a firm ments. of wine merchants for an advertisement account, and the latter defended themselves on the ground that their order was obtained by false representations. The jury gave a verdict for the plaintiffs, so that no suspicion of fraud can remain upon the proprietors of the newspaper referred to. But the case brought forward several points which are worthy of attention. The wine merehants implied by their defence that they had been deceived as to the circulation of the paper, that they had been promised an article of at least two columns commending their wines, and that they had been led to expect that Mr. Ashmead Bartlett and numerous Conservative peers who were interested in the paper would order their wines from them if they advertised therein. The verdict, as we have said, purged the proprietors of England of any charge of fraud in connection with this transaction, and therefore we suppose these impressions of the defendants were not based on sufficient grounds. But what must strike the unsophisticated reader is the curious fact that men of the world having those impressions should think of giving an order of any amount to a paper which they thought held out such inducements. "An article at least two columns in length commending their wines! What can be the position of a paper whose eanvassers could guarantee such a quid pro quo? And what can be the value of barter business bought at a ruinous price? If the merchant's goods are fairly worth the money he charges for them, so are the advertisements of a sound paper. What is the sense of either party bribing the other to buy of him? The advertisement dealer declares by such a transaction that his advertisements are not really worth the price he has fixed for them, and the merchant may be sure that his adversary, as the publisher becomes, will have a profit out of him somehow. His wine, or whatever it may be, will be sold against him, and his reputation will be injured. He will get a nominal hundred pounds' worth of advertising for say 75l., and he will think he has made 25l. by the bargain; the newspaper man puts the advertisement in type, it is true, but that does not cost much, and if there are only trifling expenses in regard to the circulation, as is probably the ease with a paper without a fixed tariff, he will no doubt dispose of the wines at less than the merchant's prices, and still make money. There are tricks in all trades, and even the newspaper business is not free from them.

* *

Spurious Cubebs.

Among the lots catalogued for the last public sales of drugs was a parcel of 5 cases (each about 160 lbs.) berries imported from Bombay. The name under which the lot was catalogued was "Cubebs," but the parcel was not actually offered for sale, it being withdrawn by the auctioneer. These so-called cubebs consisted of a mixture of the berries of a species of Rhamnus, the immature fruits of common black pepper, a few pepper stalks, and flowers of an Alpinia, together with some true cubebs.

BANKRUPTCY REPORTS.

E. L. CLEAVER, Analytical and Manufacturing Chemist, Richmond.

This case came before Mr. Registrar Giffard on Wednesday, it being the day appointed for the adjourned public examination of the bankrupt. It will be remembered that Mr. Cleaver was described as a manufacturing and analytical chemist, as well as public analyst for Kensington. He commenced business in 1877, had two partners in succession, got into legal disputes with them, and brought about his present difficulties by these means and by losses on the Stock Exchange. His accounts showed gross liabilities of 4,2071.17s.5d., of which 3,3151.17s.5d. is expected to rank. There are no assets. On the case being called on, the debtor did not answer. Mr. Roberts and Mr. Willis appeared for creditors, and the former stated that the debtor had failed to file the accounts ordered at the last sitting, and steps were now being taken to get him committed for contempt of court. His Honour said he supposed he had better adjourn the case sine

die.—Mr. Roberts: On, no; the debtor holds us at arms' length. We want to bring him before the Court. Please fix a day.—The examination was then adjourned till the 15th inst.

W. K. Ferguson & Co., Leeds.

THE first meeting of the creditors of Messrs. W. K. Ferguson & Co., chemists and electro-platers, Great George Street, Leeds, was held on October 27 at the office of the official receiver. The statement of affairs showed liabilities 7701. 14s. 8d., and assets 5361. 1s. 3d., leaving a deficiency of 2321. 13s. 5d. As the eause of their failure the debtors originally alleged that they believed they were not insolvent, but were fast for ready money, but the statement of affairs afterwards filed showed the deficiency as above stated. The official receiver said that the petition appeared to have been filed so as to bring about a dissolution of the partnership. Mr. W. H. Hewson appeared for Mr. Ferguson, and Mr. Middleton represented his partner, Mr Wetherell. On the motion to appoint Mr. Routh, who had prepared the statement, as trustee, Mr. Lowe, who appeared for Messrs. Beckett & Co., bankers, proposed Mr. J. W. Close. The latter was elected with the official receiver as a committee of inspection.

C. W. LARGE, Dentist, 203 Cornwall Road, Notting Hill.

The receiving order in this case was made on October 11, and accounts have been filed showing debts of 408%. 3s.; and assets 1%. One of the official receivers in the London Bankruptcy Court thus reports on the case:—"The debtor attributes his failure and deficiency to his liabilities for damages and law costs (336%. 12s.) incurred in an action for breach of promise of marriage in February last, also to his personal expenses since that time baving been in excess of his earnings. He has produced a fee book showing his cash receipts (49%. 14s. 6%) since May last. The debtor states that he resides in furnished rooms, and that the furniture and other property thereat belong to his landlady. The Court has made an order for the summary administration of the estate, and the debtor, on consent, has been adjudged bankrupt."

BENJAMIN THOMAS, Chemist and Druggist, Llanstephan.

THE statement of affairs in this case has been sent to us by a London creditor as a curiosity.

According to the debtor's statement he owes to unsecured creditors 393l. 13s. 4d., and to fully-secured creditors 156l. The estimated value of the securities is set down at 70l. 7s. 7d., leaving 85l. 12s. 5d. to rank against the estate, making total liabilities, 479l. 5s. 9d. The assets are estimated thus:—

Stock in trade						12	0	0	
Book debts						4	8	0	
Household furn	iture					1	7	6	
Other property,	fixtu	ires,	&c			0	17	0	
						18	12	6	
Deduct prefere	ntial	cred	itors (r	ent, ta	ixes,				
wages, &c.)						6	4	10	
		Net	assets			£1Z	7	8	

The debtor attributes his failure to "depression of trade, competition of trade, and law costs." The official receiver makes the following observations:—

Commenced business in January, 1882, with 100% borrowed from his relatives. He has given a bill of sale to his father for 150%, which accounts for the smallness of the assets. The validity of this document shall be investigated.

	£	s.	d_*
Depreciation in stock-in-trade, fixtures, and household			
furniture	. 119	6	0
Law costs of bills of sale, writs, and County Court processes,			
and interest on borrowed capital	. 146	0	0
Bad debts	. 7	0	0
Loss on advertising proprietary articles	. 14	0	0
Illuess of self and family, and consequent loss of time, and in-			
cidental expenses consequent thereupon	. 20	0	0
Depression in trade, and want of capital considerably more	4		
than	. 160	12	1
	£466	10	1
	7400	10	T

Trade Hotes.

Mr. H. Dodds's business, at 35 Bread Street, Edinburgh has been purchased by Mr. William K. Mitchell.

THE old-established business of the late J. H. Green, top of Catherine Hill, Frome, will in future be conducted by his son, Edmund C. F. Green.

Mr. Hugh Gill has purchased the business of the Arlington Pharmacy, 179 Lord Street, Southport, hitherto known as Kershaw's.

MR. B. GODDARD, who has for thirteen years been assistant and dispenser with the firm of the late Dr. D. and Dr. T. A. Elias, has commenced business as chemist and druggist at 43 London Street, Southport.

THE patents for the manufacture of saccharine and saccharine products granted to Dr. Constantin Fahlberg and the late Mr. Adolph List have been acquired by Messrs. Fahlberg. List & Co., who have established a company for working the patents at Salbke-Westerhüsen, a/Elbe, in Germany.

ROYAL APPOINTMENT.—Messrs. Clay & Abraham, chemists and druggists, Bold Street, Liverpool, have received an intimation from the Lord Chamberlain that they have been appointed pharmaceutical chemists to Her Majcsty the Queen in that city.

WE have received a new illustrated catalogue of photographic apparatus, magic lanterns, and accessories, from Messrs. Perken, Son, & Rayment, of Hatton Garden. This is worth exammination by any chemist who thinks of associating such a business with pharmacy.

Messrs. E. Lazenby & Son have adopted Barrett's patent screw stopper for all their bottles of pickles. The new style not only greatly improves the appearance, but makes the use of the pickle a much more convenient business than it has ever been before. No doubt this innovation will enhance the popularity of the pickles of these famous manufacturers.

Messrs. Arthur Heely and James Javons Aston, of Bull Ring, Birmingham, carrying on business as Philip Harris & Co., have arranged for the conversion of the concern into a limited liability company. The members of the late firm will continue to give their personal guidance and supervision, and Mr. Charles S. Ellis, who has been employed by the firm for the last eighteen years, will take the management of the wholesalc department, and will have an interest in the business.

The Carlsbad Mineral Waters.— Dr. Sipöcz, the manager of the Carlsbad sprudel salt works, writes to the German pharmaceutical papers to contradict the statement in Messrs. Gehe & Co.'s last report that an advance in the price of the Carlsbad salt may shortly be expected as a result of the increased value of the lease. Dr. Sipöcz states that, far from an advance being contemplated, the price for sprudel and spring salts in large quantities will be reduced from January 1 next. The price has hitherto been subject to a discount upon all orders of 200 kilos sprudel salt or spring salt, but this discount will in future be allowed off orders of 100 kilos of sprudel and spring salt.

BORAX COMPOUNDS .- The Patent Borax Company of Birmingham are now putting before the readers of THE CHEMIST AND DRUGGIST a prospectus of the various styles and combinations in which they are putting on the market the valuable chemical with which they have specially identified themselves. The Birmingham Company's business has developed from that which was carried on ten or twelve years ago by Mr. Arthur Robottom. Mr. Robottom, it may be remembered by some pharmacists, was a borax enthusiast, and his almost apostolic advocacy of the universal merits of this production in all the conditions of life no doubt did a great deal to popularise the article. In 1873, while travelling in California, he discovered a wonderful borax valley, and one of the few objects he met with in that vast solitude was a dead horse. The horse's carcase had probably lain there for years; the air was close and stifling, thermometer 110°, but the flesh was perfectly sweet and pure. This was striking evidence of the antiseptic properties of borax, and proved a valuable aid to Mr. Robottom's faith. Since then, and before, the virtues of borax and boracic acid have been chanted in many quarters, and it would be wasting space to reiterate these. What we wish to mention, however, is that this borax trade, which is one that legitimately associates itself with the chemists and druggists' business, is at present done almost entirely by grocers. The company have put up borax in about a score of styles or combinations. All are attractively packed, and brought before the public most effectively. There are borax alone in various sized packets, "Borax Extract of Soap," "Borax Dry Soap," "Borax Starch Glaze," "Borax Soap Powder," "Borax Sponge and Brush Powder," "Toilet Borax," "Borax Sanitary Powder," and many other preparations. These are all got up for the million. The company have no sentimental preferences in regard to their agents; but as the articles are useful, saleable, profitable, and chemical, why should not chemists be the chief dealers in them?

TRADE-MARKS APPLIED FOR.

THE Trade Marks Journal publishes the following notice:—"Any person who has good grounds of objection to the registration of any of the following marks may, within two months of the date of this journal, give uotice in duplicate at the Patent Office, in the form 'J,' in the second schedule to the Trade Marks Rules, 1883, of opposition to such registration." All emmunications relating to patents, designs, or trade-marks to e addressed to H. Reader Lack, Esq., Comptroller-General of Patents, Designs, and Trade-marks, Patent Office, 25 Southampton Buildings Chancery Lane, London, W.C.

From the "Trade Marks Journal," November 3, 1886.

- "SENSATION SOAP"; for common and perfumed soap. By George Alderoft Phillips (trading as David Thom & Co.), Whit Lane, Pendleton, Laneashire. 52,161-2.
- "ANTISEPTIC UTERINE LUBRICANT," and other wording, on label; for a medicinal preparation so named. By R. Sumner & Co., 50 Lord Street Liverpool. 53.463.
- Circular label, with monogram and designation of the company; for mineral and aërated waters, &c. By A. A. Eryan (trading as The Cardiff Coffeehouse Company), 22 St. Mary Street, Cardiff. 53,627.
- "HATOLENE" (in seript), and other wording; for a preparation for renovating silk hats. By F. H. Harris, 5 Florence Street East, Florence Road, New Cross, S.E. 54,053.
- "CHIGNELL'S CHARMS," and other wording, on label; for medicines and remedies for human use (54,715). "Chignell's 'Pilot' Pills," and other wording, on label; for pills (54,716). By William Chiguell, Clarence Road, Wood Green, Loudon, N.
- Figure of a hawk resting upon a knotted rope; for oakum. By G. S. Pinchin & Henry Mawson (trading as T. Westhorp & Co.), 67 West India Doek Road, Poplar. 55,010.
- "COLLE MIXTE," and other wording, on circular label, with two kilns in centre. By J. & S. Loeser (trading as Gebrüder Loeser), Trier, Germany. 55 122.
- T, letter G, and arrow across, and applicant's designation; for herb beer. By George Groston, 52 Albert Street, Preston. 55,254.
- "CALVERT'S PHENYLINE," and "Calvert's Terebane"; for preparations of cresylic acid included in Class 2, excluding medicines for pigs (55,578-9).

 And "Calvert's Denta-phenoiene"; for a dentifrice and mouth-wash (55,670). By F. C. Calvert & Co., Bradford.
- Fancy labels, with wording and specific titles, "May Blossom" (55,673);
 "May Bloom" (55,674); "May Flower" (55,675); for household soaps,
 By Joshua Margerison (trading as Joshua Margerison & Co.), White
 Windsor Soap Works, Leighton Street, Preston.
- "JULIACURE"; for medicines for man, viz., "Futcher's Neuralgic Pills." By A. J. Futcher, 17 Hartington Terrace, Southsea. 55,721.
- Circular label, with three eastles in centre, and designation of applicants around it; for mineral and acrated waters. By Gilpin & Co., 137 Pilgrim Street, Newcastle-on-Tyne. 55,825.
- "Alette"; for an aërated water. By Scott & Co., Hurst Street, Belfast. 55,929.
- "PERFECTA"; for an aërated non-aleoholic beverage. By R. J., R. W., & J. G. White (trading as R. White & Sons), Cunard Street, Camberwell. 56,043.
- "SALICON"; for antiseptics. By Haigh & Co., 14 Park Place, Leeds. 56.132.
- Figure of a fisherman; for a preparation for preserving leather of all kinds. By B. H. Sebröder, Skien, Norway. 56,173.

Trade Report.

It should always be remembered that prices quoted in this section are as nearly as can be ascertained the lowest that are actually paid for bulk quantities. Considerable allowances have to be added in many cases before ordinary prices can be ascertained, and for many drugs it must be recollected the range of quality is very wide.

MINCING LANE, November 4.

ACID (CITRIC).—The downward movement caused by the fall of line-juice prices in Sicily has subsided, and made room for a firm market. There has been a good business done during the week, and on Wcdnesday 1s. 11_4^3d . per 1b. was paid for spot stuff. Our stock is small, and may be put down as between 80 and 100 tons.

ACID (OXALIC) still remains neglected at the very low price of 3d. to $3\frac{1}{3}d.$ per lb.

ACID (PICRIC) sightly lower, and quoted at 1s. 1d. per lb. for crystals or powder.

ACID (TARTARIC).—The market closes firm, prices having slightly improved during the week. 1s. 7d. per 1b. is now asked for English, and 1s. $6\frac{1}{2}d$. for foreign brands.

ALUM.—There is a fair demand for home consumption, but export orders are scarce. We quote loose lump at 5l. 10s. per ton, and ground, in bags, at 6l. 2s. 6d. per ton, ex warehouse

AMMONIA.—Carbonate, unchanged at 4d. per lb. Muriate, also unaltered; rough, at 23l. per ton, and prime white at 28l. Sulphate is now quoted at 10l. 12s. 6d. for grey 24 per cent. at London; the same price prevails in Hull.

ARSENIC is dearer, and powdered white in barrels landed is now held for 10s. to 10s. 6d. per cwt.

BLEACHING-POWDER.—The demand is good, and higher prices are anticipated in many quarters; 8s. 6d. per cwt. is now the lowest quotation.

BORAX firm, but unchanged, at 25l. for *English* crystals, and 24l. 10s. for *foreign*. It is thought that there is some indication of a prospective better market.

Castile Soap is unchanged for mottled, which is held at 24s, per cwt.; white is slightly lower, at 31s, per cwt.

COPPER (SULPHATE).—The demand recently prevailing has partly subsided, but the article closes firm at 14/.

CREAM OF TARTAR.—Although there is not very much business doing in this article, the price is very firm at $124l.\ 10s.$

FINE CHEMICALS.—The following are among the present quotations:—Bismuth, at 8s. 6d. per lb. nominally. Calomel, 2s. 11d. per lb. Camphor—refined bells, 11½d.; squares, 1s. to 1s. 2½d. per lb. Chloral Hydrate, Liebreich's, 5s. 8d. per lb. Corrosive Sublimate, 2s. 4d. per lb. Citrate of Magnesia, 1s. 3d. per lb. Mercurial Ointment, 1s. 10d. per lb. Potassium Bromide, 1s. 4½d. per lb. Potassium Iodide, 8s. 9d. per lb. Precipitate—red, 3s. 2d. per lb.; white, 3s. 1d. per lb. Santonine, 8s. per lb. Tartar Emetic, 1s. 5d. per lb. Verdigris—ball, 7d. per lb.; pod, 9d. per lb.; powdered, 8d. per lb. Vermilion, 2s 5d. per lb.

IODINE is now quoted at 7d. per oz., the reduction having been caused mainly through competition outside the combination. Iodine preparations are also quoted lower; resublimed iodine, at 12s. net.

LEAD.—Acetate, steady; white, 28l. 10s. per ton; and brown, 18l. 10s. per ton. Nitrate held at 22l. per ton.

PEROXIDE OF HYDROGEN is quoted lower, and held at 4s. per gallon.

POTASH.—Biehromate remains unaltered at $3\frac{1}{2}d$. per lb. The market for chlorate has relapsed into a decline, and holders are now offering at $6\frac{1}{2}d$. Prussiate dull, at 7d. per lb.

QUININE (SULPHATE) is firm, and quoted at 2s. 6d per oz. for *Howard's* brand, in bottles; 2s. 4d. per oz. for *Pelletier's* ditto; 2s. 1d. to 2s. 2d. per oz. for *German*, in bulk; and 2s. 2d. per oz. for *Italian*, in bulk.

SALTPETRE is firm for crude, and sales of Bengal, refuse

5 lbs. per cwt., have been made at 16s. via Cape and 16s. 3d. via canal per October-November. Refined is quiet at 20s. 6d. to 21s. 6d. for English, according to mode of packing.

Soda.—Ash is selling in limited quantities at $1\frac{1}{4}d$, per degree landed. Bicarbonate has been in good demand, and is selling at 7l. 5s. ex warehouse. The demand for Caustie, which has been very lively lately, shows some signs of lessening, but the quotations still remain unchanged at 8l. for eream and 8l. 5s. for white 60 per cent. Crystols are very scarce, with a tendency to increased rates; the current quotation is 54s. to 54s. 6d. cx ship London, 47s. 6d. Tyne.

SUGAR OF LEAD.—Best white is firmly held at 22s. 6d. per cwt.

SULPHUR very dull. Rolls, 7s. 6d. to 8s. per cwt.; flowers, 9s. to 10s. per cwt., according to make.

CINCHONA BARK.—The supply offered in public sale on Tuesday was moderate in quantity. It consisted of 1,772 packages Ceylon, 60 packages Indian, 113 packages Java, and 1,213 packages South American. An improved spirit was manifested at the auction, and prices showed an advance, there being a good competition for most varieties. The American cinchonas were mostly composed of old Colombia and of Cuprea bark, but some fine quilt from Bolivia was also offered. The assortment of Java bark also showed a very good quality, while that of Ceylon bark was of a fair average, including many parcels landed several months ago. The unit is estimated at from $3\frac{1}{4}d$, to $3\frac{3}{4}d$, the former quotation being probably nearest the mark. The following were the prices realised: CEYLON.—Succirubra, branch, $1\frac{1}{4}d$. to 5d.; cbips, 2d. to 6d.; stem chips, mixed, to fine, $3\frac{1}{2}d$. to 7d.; spoke shavings, mixed, to fine bright, $3\frac{1}{2}d$. to 11d.; root, dull, to fine, $3\frac{1}{2}d$. to $8\frac{1}{2}d$.; quill, renewed, dull and woody to fine rich spoke shavings, $4\frac{1}{2}d$. to 1s. 5d. Officinalis, branch, fine, $5\frac{1}{2}d$. to 6d.; chips, $3\frac{1}{2}d$. to 8d.; spoke shavings, weak, to bright, $3\frac{1}{2}d$. to $9\frac{1}{2}d$.; root, $11\frac{1}{2}d$. to 1s. 1d.; renewed, common, superior rich spoke shavings, $7\frac{1}{2}d$. to 1s. 6d. INDIAN: Wynaad and Mysore, red, chips, 4d. to 7d.; root, 4d.; renewed, $7\frac{1}{2}d$.; shavings. 11d. JAVA: Ledgeriana, branch, 5d. to 8d.; chips, strong quilly, to fine dry, 1s. 3d. to 1s. 8d.; root, choice, 1s. 9d.; renewed, 1s. 7d. to 1s. 8d. SOUTH AMERICAN: Calisaya Ledger, quill, 1s. to 1s. 4d.; fine rich Bolivian, 1s. 5d. to 1s. 7d.; New Granaća, $2\frac{1}{2}d$. to 7d.: Colombian, 5d.: Pitayo, $4\frac{1}{2}d$. to $7\frac{1}{2}d$.; Carthagena, fine, 8d. to $8\frac{1}{2}d$. Private advices from Colombo, dated October 9, state that it is thought that the exports of cinchona from the island will not exceed 12,000,000 lbs. next season. To a considerable extent this calculation must, of course, be considered a speculative oue, as the harvesting and despatch of the bark are largely subjected to "unforeseen circumstances." The total exports of bark from Ceylon are :-

During the first days of October the arrivals from the interior show a considerable decrease as compared to those of the same period of 1885.

The shipments of cinchona from Java during the first nine months of the year were given in our last issue as about 300,000 lbs. This refers to the quantity offered in London only; the total shipments from the island are much larger. The yield in 1884 was 380,800 lbs. Government, and 275,762 lbs. private crop, a total of 656,562 In 1885 the Government crop amounted to 458,728 lbs., but the total private crop for that year is not yet ascertained. Messrs. C. L. Schepp & Zoon, of Rotterdam, are showing their friends a letter, dated October 6, from their London correspondent, reviewing the comparative prices obtained at the cinchona sales of September 21 (London), September 29 (Amsterdam), and October 5 (London). This letter contains the following passages:—"On the whole I think the bark sold well on the 29th (Amsterdam). I make the prices rather higher than those obtained at our sales on September 21. At our London sale of September 21, the unit was reported to be 3d, to 31d. On October 5 the price was practically the same. At the Amsterdam sale of the 29th, my only means of estimating the price realised is by

taking the return of those parcels which I had analysed; these were between thirty and forty in number, and gave an average of slightly over 3d, the exact figure being 302 per unit. So far, then, as I am able to form an opinion, the prices realised at London and at Amsterdam differ but slightly." It would be interesting to know the name of the London firm who thus give an opinion directly opposed to that of Messrs. Rucker & Bencraft's friends.

ANNATTO shows a tendency towards lower prices, and it is said that fair *Guadaloupe* has been sold at $3\frac{3}{4}d$. per lb. in Liverpool.

CAMPHOR.—Crude *China* is quoted at 64s. to 65s., and *Japan* at 65s. to 68s. per cwt. The market remains very quiet. Our entire stock on October 31 consisted of 4,130 packages, against 7,092 packages of the corresponding period of last year.

CONCENTRATED LEMON-JUICE.—The Messina market is firm. Holders are said to decline to sell, or even to name a price.

ESSENTIAL OILS.—Oil of Almonds is now held at 22s Bergamet remains unchanged, and there is little doing in the article, although it is held at firm rates. Oil of Caraway is quoted lower at 7s. 6d. per lb. Citronella.—The market has slightly improved, and we now quote Native oil at 1d. per oz., and Fisher's brand at $1\frac{3}{8}d$. per oz. Oil of Cloves held at 6s. per lb. Geranium.—A small lot of 50 lbs. Algerian oil has changed hands at 22s., and we hear of transactions in Turkish geranium at from 7s. 9d. to 8s. 6d. This latter variety is in very good demand. Oil of Larender. — English has been reduced in price, and fine Mitcham is now quoted at 42s. per lb. Small sales of French oil at 7s. 2d. per lb. have been made. Lemon is very firm, and the tendency of the market is in favour of a further advance. Neroli.—The reports about this article are very contradictory. In some quarters it is reported that prices are making for a fall, while other, and it would seem more reliable, statements are to the effect that an advance is likely shortly to take place, and that good oil is extremely scarce on the spot. 12s. per oz. is quoted at present. Otto of Roses .- Although there has been but very little doing this week (the total sales not exceeding 200 ozs. in small lots) the article is exceedingly firm, and competent judges believe that a further advance may take place shortly. In Constantinople the principal holders have advanced their quotations 1s. per oz. On our market 25s, is still the ruling price. Orange is in good demand for spot stuff. Good to fine quality is quoted at 7s. 3d. to 8s. per lb., with a small parcel at 6s. 3d. per lb. During the week three consignments of new crop oil arrived in London, but as they were imported by consumers they are not in the market. It is said that the delay is partly owing to the precautionary measures now taken in Italian ports againsts the cholera, which have caused the principal line of steamers to run their vessels once per month instead of fortnightly. oil of *Pimento*, 15s. per lb.; oil of *Sassafras* lower, at 2s. 3d. per lb. In the South of France there is but little doing in essential oils. The different products manufactured from the new crop of French flowers are generally placed on the market in the following months:—March and April, Violet, Jonquille, Mignonette (pomatums, oils, and extracts); May and June, Orange Flowers, Rose; Neroli, Petit Grain, Thyme, Rosemary, Origanum, Serpolet (essential oils); also Orange Flower and Rose Water; July to September, Jessamine, Tuberose (pomatums, oils, and extracts); Absinthe, Marjoram, Peppermint (essential oils); September, Lavender, Spike. (Essential Oils), and all Mixed Scents; October and November, Cassie (pomatum, oil, and extract).

GUM ARABIC.—The market continues to be very firm, but transactions have been on a small scale throughout the past week. Of East Indian gums, fine qualities of Aden and Amrad continue scarce. Sales of about 30 cases Barbary character have been made at 110s. per cwt. Mogadore gums continue to arrive in very small quantities. Amrad has sold as high as 95s. Importers ask such extreme rates that business is precluded. Fair to good quality is quoted at about 6l. per cwt. In Senegal gums there has been a fair inquiry, but little business has resulted. So far quotations remain unchanged.

Turkey sorts are maintained at a high level in consequence of the smallness of our stock, but no sales worth noting have been reported. In Liverpool a good export inquiry has been experienced in Turkey sorts, both for America and the Continent; business to a fair extent has been concluded at much stiffer prices, the sales being about 105 serons at 170s, for common brown, up to 217s. 6d. per cwt. for good quality, and a further advance is required at the close. Stock reduced to rather less than 50 serons. Ghezira has continued to fall, and the sales are about 55 serons, chiefly at 90s. to 95s. per cwt. Business in other grades has been exceedingly trifling. Brazilian gum solā at 55s.

INSECT FLOWERS.—It is thought that a rise will occur next spring, though it is difficult to see that there can be any good grounds for prognosticating so far in the future. Dalmatian houses, however, are actually sending important consignments to London for storing during the winter. Powdered flowers are quoted at 102s. for quantities of from 1 to 5 cwt.

IRISH Moss.—Common qualities are in good supply, and sales are made at 100s. to 105s. per ton.

LIQUORICE PASTE.—Smyrna brands offer at from 43s. 6d. to 47s. per cwt., and there is a fair business at these rates, with good inquiry.

ORANGE-FLOWER WATER of the new crop in 53 lb. carboys is quoted at 20s. It is feared that this article may become scarce shortly.

ORRIS ROOT is held at 29s. for really fine *Florentine*, but there is not much doing in the article just now.

Rose Water of the new crop, in 53 lb. carboys, is held at 24s.

SAFFRON is now quoted at 41s. for good Valencia. It is said that the *Spanish* crop has been very good, and the tone of the market in Valencia is decidedly quieter. The sales in that place during the month of September amounted to 38 cwts, against 31 cwts. in September, 1885, and 81 cwts. in September, 1884. The stock at Valencia on October 1 was 130 cwts., against 96 cwts, and 88 cwts, at the corresponding periods of 1885 and 1884.

VANILLA.—Reports are current that the new crop is not so large as anticipated.

CUTCH.—The market remains unchanged. In public sale, 873 boxes Eagle, M M, and other marks were bought in, and only 45 boxes mouldy and cindery stuff were sold at 1s. 3d. to 2s. per cwt. M M in good hard slabs is quoted at 28s. 6d. Star B, good hard, at 30s. 6d.; softish at 29s. Bull at 27s. 6d. Eagle at 28s. 0f the W two stars brand none is offering. The following is the statistical position of the article: in London, on October 31, the stock amounted to 2,349 tons, against 2,008 tons in 1885. The arrivals during the year were 3,494 tons, against 2,788 tons in 1885, ard the deliveries 3,264 tons, against 3,554 tons in 1885. In Liverpool, on September 30, the stock was 16,258 boxes, against 50,165 boxes in 1885.

GAMBIER is lower, sales (without reserve) having been made at 20s. 9d per cwt. for block on the spot. For good detached cubes 32s. 6d. per cwt. has been refused, and for blocky cubes 31s. 6d. per cwt. The statistical position of gambier on the London market is as follows:—

	1886	1885
	Tons	Tons
Stock on October 31	 1,364	1,426
Imports since January 1	 11,833	12,459
Deliveries	 11.503	12.491

In Liverpool, at the end of last month, there was a stock of only 650 bales block gambier.

SHELLAC.—In public sale on Tuesday, 736 chests were offered, but the trade did not care to buy at the prices required, and by far the greater part was bought in over value. The number of chests sold was 145, consisting of the following brands:—Second orange, fair SCSR in diamond, at 48s. to 49s.; S in double triangle at 47s.; garnet, OCC fair, at 48s.; dull, blocky ditto, pressed for sale by holders, at 44s. to 45s. per cwt. A few lots very fine pale orange, A in triangle, were shown and bought in at a nominal price of 73s., but a good deal less would probably buy the lot. With the

improvement in price on this market, the Calcutta shipmcuts, which had lately shown a considerable falling off, have again increased, but holders, with a view as much as possible to reduce the London stock, demand comparatively higher prices for arrival than for spot stuff. The following are the London shellae statistics:—

Stock on October 31	Orange Garnet Button	1886 Chests 37,153 11,681 11,904	1885 Chests 3 6,607 13,335 8,702
	Total	60,738	58,644
Imports from Jan. 1 to Oct. 31	Orange Garnet Button	26,241 6,801 11,588	23,167 11,145 12,207
	Total	44,630	46,519
Deliveries from Jan, 1 to Oct. 31	Orange Garnet Button	25,331 7,185 9,312	19,658 6,501 8,424
	Total	41,8∠8	34,583

The shipments from Calcutta to the United Kingdom for the last half of October were 3,500 cwt., making a total of 9,300 cwt. for the month, against 5,100 cwt. last year.

STICKLAC.—Fair Siam, free from wood, is held at 33s. to 34s. per cwt. In sale on Tuesday, a parcel was bought in at 36s. per cwt., and small dusty Kurrachee at 10s. per cwt. Our stock is about 4,700 cases.

TURMERIC is very weak, and prices have now reached a level which would scarcely appear to afford much scope for further decrease. There is, however, very little demand, and the market is in quite a demoralised condition. Of 713 bags Madras, 283 found purchasers at 10s. 9d. per cwt., for wormy yellow Madras finger, slightly mixed with bulb, and 9s. 9d. for ditto bulb, partly split; 260 bags Bengal, finger mixed with bulb, realised 14s. 3d. per cwt.; while 680 bags Cochin were bought in.

Isinglass.—A total supply of 370 packages was offered for sale on Tuesday, and mostly disposed of, in nearly every instance at an advance. The following prices were obtained:-Brazil: Pará lump, good pale first pile to second pile, 4s. 5d. to 2s. 10d.; good third, to fourth pile, 2s. 7d. to 1s. 11d.; tongue, good pale, 5s. 2d. to low, 1s. 5d.; honeycomb, 2s. to 9d.; Marauham, 2s. 10d. for fair lump, to 11d. for pickings. Penang: Leaf, fine pale, 3s. 11d. to 4s. 1d.; good to middling, 3s. 9d. to 3s.; ordinary to skinny, 2s. 11d. to 1s. 5d.; tongue, middling to ordinary red, 3s. 1d. to 2s. 3d.; cake, fine pale to ordinary, 1s. 8d. to 11d. Saigon, good to fine long leaf, 4s. 6d. to 4s. 10d. Bombay, new tongue, middling to good, 2s. 7d. to 3s.; ordinary, 2s. to 2s. 3d.; tongue, middling to low skinny, 2s. 10d. to 11d.; cake, fine pale, to low small and dark, 1s. 11d. to 4d. Senegal, rough leaf, 11d. to 1s. These prices show an advance over those obtained in last public sale of 2d. to 4d. for Penang, 3d. to 4d. for new, and 9d. to 1s. for old Bombay, and 1d. to 9d. for Brazil.

Cocoa-Nut Oil is very firm at 26l. 10s. for Ceylon oil on the spot, but 26l. has been taken for September-October shipment. For Cochin oil, of which fresh arrivals of some importance have come to hand, the demand has not been quite so lively. Pipes are held at 36l. Mauritius oil in hogsheads is still held at 26l. 10s. As compared with the corresponding periods of 1885 and 1884, Ceylon and Mauritius oils show a constant decrease in vilue, while Cochin has considerably increased in price. The total exports of cocoa-nut oil from Ceylon from October 1, 1885, to September 30, 1836, amounted to 234,308 cwts, against 274,998 cwts. in 1884-5, 423,830 cwts. in 1883-4, and 366,299 cwts. in 1882-3.

COTTON-SEED OIL.—In London spot stuff is held at an advance on last week's rates, but the Hull quotations are lower. On Wednesday the rates for cotton oil were:—London Crude, spot, 16l. 7s. 6d., Refined 18l. 15s. to 19l. 10s. Hull, spot, Refined in casks 17l. 10s., November-April 16l. 17s. 6d. Crude spot 14s. 15s. to 14l. 17s. 6d., November-

April 141, 10s. The O. P. and D. Reporter, under date of October 19, thus describes the New York market:—The cotton oil situation has not improved. Values of all grades are nominal. Buyers are scarce and inquiries from shippers light. Either the scason is backward, or there has been no haste to start the mills in the South, as supplies of oil are behind this time last season. Former traders in cotton oil are directing their attention to other specialties, as the future is recognised to be too uncertain to speculate in. Tallow has made another start upward, and it is expected that other greases will follow, in which case cotton oils will improve, but there is a lack of demand to support the market. The business doing is passing through less hands and being concentrated gradually. By this means violent fluctuations are prevented and forced sales will not be a feature of the market. A steadier feeling may be expected, at all events, and very little opportunity will be left for speculation.

LINSEED OIL closes steady, the market having advanced for all positions. We quote—London: spot, pipes, 20l. 5s. to 20l. 7s. 6d.; barrels, 20l. 10s. to 20l. 12s. 6d.; November-December, 20l. 5s.; January-April, at 20l. 5s. Ilull: spot, 20l.; barrels, 20l. 5s. to 20l. 7s. 6d.; December, 19l. 12s. 6d.; January-April, 19l. 15s.

OLIVE OIL is very quiet at nominal rates—viz.: 40l. for Seville, 37l. for Malaga, 36l. 5s. for Messina, and 33l. for Mogadore. In Liverpool a moderate business has been done in Taranto, at 37l. 15s. to 38l.; and in Smyrna, at 34l. to 35l. per tun.

Palm Oil.—Fine Lagos oil is still held at 23l. 10s, against 29l. 10s. to 30l. and 34l. to 34l. 5s. at the corresponding periods of 1885 and 1884. This price is certainly a very low one, but there does not seem much prospect of improvement, as the shipments of the article have reached an unprecedented total. In Liverpool the stock of palm oil on September 30 was 8,747 tons, against 5,850 and 1,659 tons respectively in 1885 and 1884. The quality of palm oil varies considerably according to the locality of its production, but oil from any particular port remains fairly constant. Oil shipped at Lagos is the cleauest, least rancid, and almost the softest; "Brass" oil is nearly as pure, but is the hardest of all; "Cameroons" and "Windward" are of medium quality as regards both cleanliness and hardness; "Saltpond" and "Monrovian" oils are particularly dirty.

Petroleum.—The tone of the market for American oil is steady, especially for spot oil, but thus far prices have certainly not shown the advance anticipated in many quarters. It is said by many operators that the present time is a favourable one for making contracts, as very little has yet been bought by the trade, and any sudden demand might enhance values, but notwithstanding this, we hear of no business other than for trade requirements. In face of November tenders the trade are buying sparingly, but it is rumoured that only a small portion of November oil will be tendered on the 1st., and those in want of their oil may have to wait. The greater part of the November oil is often kept back from various causes at this time of the season. To-day's quotations are: American on the spot $5\frac{a}{16}d$. to $5\frac{1}{16}d$. November–December, $5\frac{a}{16}d$. to $5\frac{a}{5}d$. January–March $5\frac{a}{5}d$. to $5\frac{1}{16}d$. Russian on the spot $5\frac{1}{4}d$. to $5\frac{a}{16}d$. according to brand, November–December, $5\frac{a}{5}d$. to $5\frac{1}{16}d$. January–March, $5\frac{a}{11}d$. In Russian oil a fair business has been done at lower prices than have lately ruled. The O. P. & D. Reporter writes on October 19, concerning the American market that the week then ending has been notable only for the dulness that prevailed during the first four days. The temper of the market appears to be more subject to influence by reports from the producing region, and intelligence is looked for with interest, reports being scanned and their possible or probable effect considered, which a couple of weeks ago would scarce have attracted attention. It is also a notable fact that the market responds more promptly to unfavourable news than to reports of conditions that should favour higher prices.

RAPE OIL.—Since our last report an advance has occurred, and business has been done for November-December and January at 21l. 5s. During the latter part of the week the market again gave way, and we now quote:—English brown, spot, 20l. 15s.; October-December, 21l.; January-April, 21l. 5s. English refined, spot, 22l. 5s.

TALLOW.—The market has remained firm but unchanged, with the exception of Australian mutton, which is about 6d. dearer. Quotations now stand: P.Y.C. on the spot, 30s. 3d.; Australian, good to fine mutton, 27s. 6d. to 28s. 6d.; good to fine beef, 24s. to 25s. Melbourne advices, dated September 20, report a very weak market with a downward tendency. Although there has been no actual decline in prices, the business transacted has been too small to serve as a guide to values, as vendors reserves have been too high to admit of extensive business on export account. The local trade have operated sparingly, and the tone of the market throughout has been very depressed. Russian is quoted at 30s. 3d. for St. Petersburg yellow candle. The stock of tallow in warehouse in London, on October 31, was 11,338 packages, against 18,600 and 22,993 packages on the corresponding dates of 1885 and 1884.

TURPENTINE has become slightly cheaper since our last report, and closes at 27s. 3d. for American spirits on the spot, 27s. 3d. for ditto November-December, and 27s. 6d. January-April. The following was the statistical position of turpentine spirits on October 30:—

					1833	1885
American,	bar	rels stock			19.632	37,119
,,	53	afloat to	Londe	01	10,800	7,049
**	,,	;,	Cork	••	3,935	1,424

ARROWROOT.—The price of Queensland arrowroot is so low that the more recent planters in that colony are turning their attention to other crops, and even to carting railway materials. The centre of the industry is Pimpana, a small township about thirty miles from Brisbane. A certain quantity was formerly produced in Norfolk Island, from Maxanta arundinacea, but the price being unremunerative, its growth has been given up.

Cassia Lignea is unchanged at previous rates, viz., $24s.\ 6d.$ to 25s. for good merchantable quality.

CHILLIES are in good request at unchanged prices. In public sale 270 out of a total of 340 bales *Zanzibar* were disposed of at 30s. to 31s. per cwt. for good to fine bright.

CLOVES are cheaper, and selling at $9\frac{1}{4}d$. to $9\frac{1}{2}d$. for ordinary to barely fair Zanzibar. Good quality was not offered.

GINGER.—The supply in this week's auctions has been a very small one. Of the *Cochin* variety, only 87 cases were put up, and nearly all sold at somewhat reduced prices, viz., 40s. to 43s. for small to medium, part cut, and 56s. for medium; good *Cochin* was not offered. *Jamaica* is dearer, but nothing was sold on Wednesday, buyers not feeling disposed to conecde the advance. *African* ginger remains neglected.

LONG PEPPER selling at 63s. per cwt.

MACE dull, with small sales of middling *Penany* at 1s. 6d. to 1s. 7d., low ditto at 1s. 3d. per lb. Wild *Bombay* mace, common dark to ordinary brown, realises from 5d. to $6\frac{1}{2}d$. per lb. On the Singapore market at the beginning of October the article was in good request at full rates.

NUTMEGS are easier, with moderate sales of Java 77's at 2s. 3d. to 2s. 4d.; and Travaneore, 86's at 2s. 2d., and 108's to 164's at 1s. 10d. to 1s. 1d. per lb.

Pepper (Black) is easy at lower rates. The major part of the 1,495 bags placed in auction on Wednesday consisted of Atcheen, part of which sold at $6\frac{1}{8}d$. per lb. for ordinary quality (without reserve), containing 4 per cent. dust, to $6\frac{1}{8}d$. for good quality; fair Singapore is worth $7\frac{1}{8}d$., and Tellicherry 8d. per lb. Private advices from the Lampong districts in Sumatra state that at the end of August the gathering of the pepper crop was in full progress. The fruit had suffered from excess of rain, but the crop was nevertheless abundant. The part not yet gathered also presented a most favourable appearance, and a very large yield was anticipated. On the pepper markets at Telok-Betong and Tandjong Karang the price was 32f. per picul $(4\frac{1}{8}d$. per lb.). In Singapore the new crop is expected to arrive about the middle of December, but according to latest advices there has been no business for forward delivery.

Pepper (Wilite).—Our market is quiet, with forced sales at $10\frac{1}{4}d$. to $10\frac{1}{2}d$. for *Penang*, the closing price being at the lower figure. On the Singapore market the price has de-

PIMENTO steady at 2d. to $2\frac{1}{4}d$. per lb. for very ordinary to grey, $2\frac{3}{8}d$. to $2\frac{1}{4}d$. for middling to fairly good, and $2\frac{5}{8}d$. for good bold.

THE ESSENTIAL OIL MARKETS.

OIL OF ANISE.—The Russian anise crop has been a very large one, and the quality is fine on the whole, owing to the good weather prevailing during the gathering. It seems that it is impossible to avoid the admixture of earth with the seed, as threshing takes place in the open. It is not probable that prices will give way any further, for there is nothing left in stock from last year's crop, and values are lower than they have ever been known before. The growing demand for a superfine quality of oil of anise has led to the manufacture of pure anethol in commercial quantities by a process in which no heat is employed. Oil of anise, whether prepared from the Russian, Spanish, or other varieties, consists of two different bodies. One of these, anethol, may be said to form the quintessence of the essential oil. Anethol is of excellent aroma, and congeals at +20° C. The other body is a light non-congealing hydrocarbon, of a most disagreeable taste and flavour, the presence of which in ordinary oil of anise considerably affects the quality. It follows, therefore, that pure anethol surpasses in excellence any oil of anise.

OIL OF CARAWAY.—In August the yield of the Dutch caraway crop was variously estimated at from 120,000 to 250,000 bales, an enormous quantity, even if, as is generally thought, the correct figure is nearer the lower than the higher estimate. If even the lower estimate should prove correct, prices must necessarily fall considerably, for a crop of 30,000 bales has hitherto been sufficient for the requirements until the end of the season. It is not likely that a fourfold quantity could at all be consumed, especially as the yield of other countries must also be taken into consideration. In Germany the crop has been satisfactory, but the German seed is too deficient in oil to be used for distilling purposes. Arrivals may be expected from Finland, but this variety is an inferior one. Offers have also been received from Sweden and Norway, but business in these varieties does not commence until November.

OIL OF CASSIA.—Notwithstanding the low prices, production in China has increased, but not so the consumption. It is stated that one of the largest American soap-makers, who employed over 400 cases per annum, has entirely given up the use of this oil.

OIL OF CHAMOMILES.—It is possible that the supply of genuine oil may fail during the ensuing season, the crop of the variety of the flowers required for its distillation having been small. The cultivation of Roman chamomiles in Germany is steadily receding, and German distillers have to import part of their material from abroad.

OIL OF CAMPHOR.—This article is now very largely employed for the manufacture of safrol, and the light camphor oil, which is gained as a by-product in this process, can therefore be sold at very low rates. This camphor oil is excellent as a dissolvent of resins and gutta-percha, and is also largely used in printing works for cleansing type and plates.

OIL OF CLOVES.—Competition in this article is very severe, and will, it is said, be shortly increased by the participation of a Réunion firm who have recently commenced the distillation of different essential oils, principally, it is thought, with an eye to the requirements of the French market.

OIL OF CORIANDER.—The crop in Germany was so good that it has not been necessary to draw supplies from Austria or Russia, which yield an inferior product. Morocco has very recently entered the field as a purveyor of coriander seed, but with small chance of success, requirements being fully provided for by the present sources of supply.

OIL OF CUBERS.—The price of this article has almost constantly risen during the last eight years, the following being the average quotations:—1879, 4s. 6d. per lb.; 1880, 5s. 9d. per lb.; 1881, 11s. per lb.; 1882, 17s. per lb.; 1883, 16s. 6d. per lb.; 1884, 18s. 6d. per lb.; 1885, 22s. per lb.; 1886, 27s. per lb. Purchasers should operate very carefully,

as the high values may lead to an increased cultivation of the pepper in Java.

OIL OF CUS-CUS.—Several competitors of the East Indian cus cus root have recently made their appearance. Samples have been received in Holland of Javanese cus-cus root, and a French house is endeavouring to introduce oil from eus-cus grown in the island of Réunion. The consumption of the oil is, however, of such a limited character that the extension of cus-cus root growing can scarcely be a remunerative undertaking.

OIL OF GERANIUM.—It is reported from various quarters that the cultivation of the geranium in Algeria is about to be discontinued, as it is no longer profitable. This threat should not be regarded in too serious a light, but nevertheless it appears a fact that tobaceo and wine-growing pay better, and that a decrease of production may be expected. The prices have never before ruled so low, and considering that 20 ewts, of fresh geranium leaves are required to distil 35 oz, of oil, there is not much room for a margin. The trade lies mainly in the hands of a few agents in Algiers, who collect the product from the small distillers. Corsican geranium oil equals in quality good Algerian oil. It is mostly shipped to London, and may frequently be bought there below market value. Turkish geranium, or palmarosa oil, in good quality is scarce, and only middling and ordinary varieties have been exported during the last few months. Fine qualities fetch high prices.

OIL or Hors.—The variety distilled from unsulphured hops is generally preferred to that prepared from lupulin. Recently the system has been introduced of extracting the essential oil from the raw material in vacuo, in which manner the hops retain their original freshness of colour. The bulk of the oil of hops is exported, and the consumption is rapidly increasing.

OIL OF LAVENDER.—Grasse reports confirm the rumours of a short crop in lavender and all other plants of the N. O. labiatæ in Southern France. It is said that the portable stills which are let on hire by the communes have returned very small results, and that a scarcity is probable, not only in the superfine oils of the high districts but also in the medium qualities.

OIL OF LINALOE.—The price of this essential oil has fallen so low that it is no longer remunerative to import the wood for distillation in Europe, especially because most consignments contain a considerable proportion of useless wood of a terebenthinous odour. The oil itself is now imported from the interior of Mexico, but the consignments are not made with any regularity. The French trade has been interrupted during several months owing to the decision of the customs officers to classify the oil, known in France as Essence de Bois de Rose along with otto of rose, and levy on it the duty payable on the latter, viz. 40 francs per kilo., of eourse a prohibitive duty on oil of linaloe. This arbitrary classification has recently been rescinded.

MIRBANE.—The depressed condition of the aniline-dye industry, in conjunction with a continued over-production of coal-tar in gasworks, have caused an unprecedented depreciation of tar products, in which no sign of improvement is visible. We understand that many gasworks are already trying experiments for the use of coal-tar as a fuel, the price obtained for this article being under the cost of production. The other chief ingredients of mirbane—viz. nitric acid and sulphuric acid—have also decreased in price, and under these circumstances mirbane can now be manufactured under more advantageous conditions than before.

OIL OF NEROLI.—The distillation of orange-flowers in May and June last has not been satisfactory, and it is feared that the stock may not suffice until the end of the season. The principal distillers have decided not to manufacture the usual quantities of orange-flower water, but to redistil the oil contained in the water by coholation.

OIL OF OLIBANUM.—This oil, which was first introduced into commerce last spring, has been favourably received, and is much used as an ingredient in smokers' mixtures.

OIL OF OPOPANAX.—The demand is still increasing largely, and it would appear as if the well-known *extrait opopanax* were again coming into fashion. It is possible that the

supplies of the raw material may again be cut off, as was the case some time ago, when no resin was offering in the market for years.

OIL OF ORRIS.—This essential oil may be preserved for years without injury to the quality. It is best kept with the addition of alcohol, by which the myristic acid, which is one of its constituents, is aëtherised and cannot injuriously affect the odour. Orris oil is now made in large quantities, in order to meet the growing demand as a substitute and intensifying agent of the natural violet odour.

OIL OF PEACH KERNELS.—The higher prices obtained for peach-kernels will doubtless influence the value of the oil. Syrian kernels are held at an advance of 20 per cent. Sicilian are dearer still, while from Mogadore hardly arything is offering. The production in Hungary, Macedonia, and Southern France is unimportant. California might, no douht, place large quantities on the market if the opening of the kernels were not so troublesome a proceeding. In Syria the kernels were formerly opened by hand, after having previously been soaked in water, but special machinery is now employed, and the producers are evidently intent upon producing a good article. Advices from Beyrout and Damaseus mention a steady advice in prices, as a result of the growing demand. Oil of peach kernels should always be tested for alcohol, with which it is frequently adulterated to the extent of 5 to 10 per cent.

OIL OF PEPPERMINT (JAFANESE).—This variety of mint, whether or not deprived of its menthol, cannot be employed in the manufacture of liqueurs or lozenges because of its disagreeable bitter after-taste. The very low price of the Japanese oil renders it, however, eminently suitable as a perfume for soaps and cheap cosmetics.

OIL OF PETITGRAIN.—The French oil suffers severe competition from the Paraguayan variety, and it is not unlikely that a large percentage of the latter finds its way to France for reshipment as French oil. The South American oil is very scarce, and whenever a parcel is placed on the market it becomes an object of lively competition, the French producers doing their utmost to secure all supplies. The use of oil of petitgrain is growing, but if the present scarcity of the article should tempt the South American producers to raise their demands considerably, the consumption mightagain decrease.

OIL OF PINE.—The variety most in request for perfumery purposes is the exquisite oil of the *Pinus picea*; in fact this oil has taken the place of that of the *Pinus pumilio*, which was formerly employed in the manufacture of spirit of coniferæ, but is now only used medicinally in rheumatism. The Siberian oil which was placed in our market some months ago is obtained from the *Larix Sibirica Ledeboer*; it specific gravity is 0.913, and its boiling-point 169°. This os can now be procured in wholesale quantities, and would appear to be recommendable as an ingredient in perfume manufacture.

OIL OF ROSEMARY.—The French yield has been a very restricted one, and it appears that quotations for this variety of rosemary will shortly be higher. Concerning the Italian erop, the reports are also extremely unfavourable. It is said that the collection of the herb has been commenced too late in the scason through sheer carelessness, and that, besides, the plants have been damaged by rain, so that the total yield will not exceed 50 or 60 per cent. of that of last year. French buyers have given large orders to Italian holders.

OIL OF SANDAL-WOOD.—There appears to be some foundation for the report that the supply of East Indian sandal-wood may decrease in future. The consumption of West-Indian oil of sandal-wood has much diminished lately. New York used to be the principal market for this variety, a single manufacturer taking thousands of lbs. annually. The origin of the West Indian sandal-wood, which first appeared in commerce about 1870, has long been a matter of conjecture, but it seems that the tree yielding the wood has now been traced.

OIL OF VALERIAN.—The stock of this oil has been greatly reduced by heavy export orders, and arrivals of the new root are anxiously looked for. The Dutch root, which has now been a market article for some years, is found very suitable, and seriously competes with the German article. (From Schimmet & Co.'s Autumn Report.)



Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish.

Write on one side of the paper only; write early; and devote a separate sheet of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers please mark what you wish us to read.

Ask us anything of pharmaceutical interest: we shall do our best to reply.

Letters, queries, &c., not noticed in this issue will, if possible, be attended to next wee'r.

Our B.P. Corrections Corrected.

SIR,—I protest against the term "corrections" being applied to the 303 memoranda relating to the British Pharmacopæia given in your last number. With your suggestion that the student should jot such matters down in his interleaved copy of the Pharmacopæia as "items" I agree: for each item will furnish material for useful thought, as will, indeed, hundreds and thousands of other pharmacopæial items about which there may be differences of opinion. But if every such point is to be set down as a "correction" the number may easily be extended to ten times 303, and real corrections be lost sight of altogether. I protest against such misuse of terms. Kindly give me space to illustrate the grounds of my protest by reference to only a few, say the first dozen, of your twenty-five dozens of these so-called "corrections."

"Correction" 1.—Among the "Substitutions," on page xxv of the Pharmacopæia, your contributors would add infusum cinchonæ (rubræ) acidum for infusum cinchonæ flavæ. Now here reference is made either to the name or to the preparation. If to a change of name, it is already given on page xxiii of the Pharmacopæia; if to the preparation, the change is already noted on page xxv of the work. The correction as a correction is, therefore, to say the least, superfluous.

"Correction" 2.—Among the list of "Preparations, the composition of which has been altered," page xxv of the Pharmacopæia, your correspondents add aqua laurocerasi. But this preparation has not been, in the official sense, altered in composition; for there was no prior standard, or even common strength, from which to alter it. It has been altered from the old irrregularity to regularity of composition, which is quite a different matter. This correction also, quâ correction, is superfluous.

"Correction" 3.—Among the preparations just named, on page xxv, is infusum cinchonæ acidum. *Omit* acidum, your friends say. They thus produce a reference to a preparation which does not exist in the present Pharmacopæia. Besides, infusum einchonæ is given in the present text as a synonym.

"Correction" 4.—Also among the notices, on page xxv, of preparations altered in composition, add, they say, spiritus ammonite aromaticus. Like aqua laurocerasi, this preparation has been made regular in composition from being highly irregular. There has not been made any such alteration of composition as was necessary to be brought specially under the notice of prescribers. No major alteration in composition was designed; and, remember, at the head of the official list

occurs the sentence, "Minor alterations are not included." This fourth correction also is superfluous.

"Correction" 5.— Your correctors under acetum scillæ would give the proportion of vinegar of squill in oxymel of squill and in syrup of squill. Very good. But it does not follow that the compilers of the Pharmacopæia were incorrect in not stating the proportions. I am able to say that there was no intention of stating them.

"Correction" 6.—Your critics would add injectio morphine hypodermica to the list of official acetates. But that list already includes acetate of morphine and, indeed, its liquor. It is a question whether even the liquor should have been included.

"Correction" 7.—1dd glyccrinum plumbi subacetatis to the official acetates, they say. This is an exactly similar case to that just mentioned; that is to say, subacetate of lead is already included amongst the official acetates. Of course it is difficult to know where to draw the line as regards insertion of cross-references in the Pharmacopecia. As a friend of students I might, perhaps, insert all; but, in another capacity, I have to remember that the cross-references are not primarily for students; they originally were inserted, in 1867, for prescribers only I am assured.

"Correction" 8.—Under acidum aceticum your post-card competitors would add, "Preparation in which acetic acid is used—vinum ipecacuanhæ." This is not only erroneous as a correction, but bad as a suggestion, for acetic acid is not used in this preparation; and to include it even as an article used in the manufacture of the preparation would be to give undue prominence to an article which serves only a temporary purpose and then is discarded.

"Correction" 9.—To "preparations in which glacial acetic acid is used" your correction-compilers would add liquor ferri acetatis fortior. Another erroneous correction. Their suggestion might have been to include this liquor in a new list, namely, a list of preparations in the manufacture of which glacial acetic acid is used. That, however, is another matter. At present the "correction" is no correction. This is no quibble, the correctors are at fault in their chemistry.

"Correction" 10.—Under acidum boricum your friends would add the strength of the ointment. I do not agree. There has never been any intention to give the strength of every preparation.

"Correction" 11.—Your prize-winners would insert borax as an official borate. It is not chemically regarded as a borate.

"Correction" 12.—Under acidum carbolicum they would insert the strength of the ointment. This is another of the many preparations of which it was considered unnecessary to give the strength. And they would state that carbolic acid is used in the preparations termed sulphocarbolates—a suggestion which shows either that their chemistry or their power of constructing a sentence is weak.

So far, not one of the so-styled "corrections" is, in my judgment, such a correction as an author of a book would accept as a correction. A glance over the remainder reveals a few already published, as you observe, and some crossreferences of which many would be admitted to the Pharmacopæia by friends of students but they cannot properly beallowed to be corrections. No blame attaches to your prizecandidates for terming these cross-references corrections, for they have previously been so termed; several also have as much claim to admission to the Pharmaeopæia as a few that arc already there, while others now there are as deserving of exclusion as some that are excluded. It is difficult, as I have said, to draw the line. Of the other "items," as you call them, in your 303 list, the chief are additions showing the strength of preparations; just such items or memoranda asthe producers of your list (nearly all pharmaceutical pupils

or assistants, I presume) would like to insert in a Pharmacopœia. Such additions would perhaps do little harm, but their insertion was never contemplated by the compilers of the Pharmacopæia; they are not corrections. students will see the undesirability of drowning or dwarfing important cross-references or statements of strengths of preparations by the insertion of large numbers which are trivial or, at all events, of no importance to the prescriber. There are good authorities who think that the next Pharmacopæia would not lose in dignity if the cross-references and their associated notices of strengths of preparations were swept away altogether. I am not sure that even the student would really suffer by their absence. When I was a pupil I made out cross-references, strengths, &c., &c., for myself, and at any time during the past thirty years I have found that I knew more about such data than is known one year after "passing" by the man who has crammed them up from published compendia.

Considering that the Pharmacopæia is not an ordinary book, but a collection of nearly one thousand separate monographs, in most of which are scores of entrances for errors other than literary slips, and considering that twenty thousand copies of the volume have been circulated amongst readers who daily use the book, and who are prompted by many motives-including, sir, the praiseworthy object of earning your guineas-to detect and publish errors, it is to me astonishing that a bare half hundred or so of real corrections—and scarcely any involving consequences of importance-should have been made or have been brought to light. I am sorry that there should be one. But errors there must be and are in all Pharmacopæias. As you have said, "No Pharmacopæia, however laboriously compiled and edited, can be issued from the press in a perfect state; errors must and will creep in." The labour of compiling and editing a Pharmacopæia is enormous, as perhaps only compilers and editors of Pharmacopæias fully know. Compilers and editors, how ever, are the first to welcome all real corrections that can tend to make perfect a volume of such imperial importance. I cannot allow that the set of 303 "corrections" of your associated correspondents are of this character.

And now from your contributors allow me to turn for a moment to yourself. With your dictum respecting the Pharmacopæia, that "those subsections which are so useful to students . . . should either be made perfect or omitted altogether," I agree, for it is a mere truism, and does not touch the real and difficult question-namely, as to what constitutes being "made perfect." "Made perfect" from the standard of the prescriber, from that of the dispenser, from that of principals, or from that of students? Any attempt to make it perfect for all classes would result in the production of a work so unwieldy as to be useless to every class. The preface of the work throws some light on this question as regards practitioners in medicine and pharmacy, but has no direct word for the pupil as a pupil. Doubtless we all have our opinions on this point, but I think I may claim, not only to be a proved friend of the student, and to have thought out the question carefully, but to have published more on the subject than any leader in pharmacy. (See The Chemist AND DRUGGIST and other journals of just four years ago-"The Pharmacopæia as a Student's Manual.") My opinion on the subject is unchanged-namely, that, while the Pharmacopæia should be frequently in the hands of the student at every stage of his career, it should never be regarded as an educational book in the sense in which ordinary manuals are educational, and that any attempt to make it such a work is doomed to failure. While, however, no class of correctors or critics of the work must expect that any future Pharmacopæia will ever approach perfection, as perfection

may be understood by any one class, yet all may doubtless rest assured that the more the l'harmacopœia is earnestly, and honestly, and really corrected and criticised, the more useful *all round* will the Pharmacopœia become.

JOHN ATTFIELD.

SIR,—Has no Argus-cyed corrector seen the blunder about inf. senega, where I fluid part of No. 20 powder is ordered to be taken? Seems to me, most of the corrections in your list are captious fault-finding, and would add more to the bulk of the Pharmacopœia than its usefulness. Who's to correct the correctors? See the very first one on the list. The Pharmacopœia makes no mention of flar, and it is surely going a little out of the way to make an error and then correct it. See Substitutions, page xxv, and read line 12 from foot. The weekly Chemist and Druggist is always looked forward to with pleasure. Long may it wave! Keep the hours of Sir John Lubbock's Bill here as it is, and would like to see it in operation all over.

Hamilton, N.B., November 1. JOHN STEWART.

Shop Hours Regulation Bill.

SIR,—Mr. Fitch has in my opinion done the trade infinite service in championing the cause of liberty, and deserves the thanks of all those who object to, aye, and refuse to be down-trodden and ruined by birds who have already feathered their own nests, and now wish for comparative retirement, although too miserly to retire actually, but who would drive their fellow-tradesman who is now on the up-hill journey first, to the police-court, to answer the charge of honestly trying to provide for his wife and family and maintain himself respectably; then to the Bankruptcy Court, and ultimately to the Workhouse, to be a recipient of those rates to which, otherwise, it would have been his pride and pleasure to contribute—a fair illustration of an honourable citizen converted into a pauper by faddists' legislation.

Sir, I should like to know whether it has occurred to

your correspondents who give the Bill such unqualified support what its ultimate effects would be. What would be the effect of the passing of the Bill on the various gas companies of the kingdom when the consumption of gas would be reduced to less than half? I know it is argued by some that the tradesman would effect a saving by burning less gas; but, Sir, although there appears to be so many mad people in the world, I do not think there are any business men so insane as to burn gas just for the pleasure of doing so, or merely to increase the profits of the gas companies. No, the small outlay in gas is supposed to return to the consumer a hundredfold, by enabling him to carry on his business after nightfall. Again, the effect on labour. Consequent on the Short Hours Bill becoming law, there would be consequently less time to transact business, therefore there would be less business to transact; ergo the employer would not be in a position to pay so high a salary to his assistant or assistants, and surely the salaries received by competent and qualified assistants are now quite low enough—they compare very unfavourably with the salaries received by grocers' and drapers' assistants. Again, the effect of the Bill would be to encourage illegal trading (that is, if getting one's own living honestly can be called illegal). I have only to cite the complete failure of the Welsh Sunday Closing Act, with its illegal Sunday drinking in licensed houses, and its bogus clubs carried on under the very nose of the police, to bring into contempt the proposed prohibitive measure.

But where the shoe pinches most is in the case of suburbs and small villages adjacent to towns, where there are market-trains taking people into town to make their purchases, and only returning after the time proposed by the Bill to close all retail shops, as it is in this neighbourhood. If this Bill becomes law I may almost as well close my shop at six o'clock on a Saturday evening as at ten, as I rely upon the return of my customers by the market-train to swell my takings for the day. The case of the boys and the frogs over again! Very nice for the tradesmen in towns, but commercial death to those in the suburbs and villages.

I should like to ask why tobacconists—the people who vend the very article that so many scientists and medical men condemn as being the most baneful of all in present demandshould be allowed to remain open while others are compelled to close. Is it that the closing of tobacconists' shops would deprive a certain class of their evening smoke, or is it that the sale of tobacco yields a good return to the exchequer of the national revenue, and the restriction of the sale would considerably affect the financial budget? If this is true we shall soon hear of grocers and others holding off licences being exempt.

A very sad but true phase of the case is that a very considerable addition will have to be made to the number of the police force, thereby increasing the rates, that a proper watch may be instituted to prevent tradesmen from violating any of the clauses of this most illiberal and tyrannical Curfew

You must not conclude from these remarks of mine that I should object to have time for recreation, both mental and physical, any more than some of your most ardent supporters of the Bill. Indeed I should hail with delight the opportunity thus offered, and no doubt my health would benefit greatly if I could afford the time for such indulgences; but, Sir, with the sad depression in trade generally, and the opposition of the "stores" in particular, I find it requires all my time and

energies to get a livelihood.

In conclusion, I will observe that it has been, I think, the custom for "stores" to close early, even earlier than the proposed bill proposes to close retail shops, and it may be that some customers who, had the "stores" been open, would have gone there, would have been compelled from necessity to patronise the tradesman. This is really very hard on the "stores," and perhaps the prometers of the Bill see it in this light, or perhaps Sir John Lubbock and his fellow coercionists are shareholders in the "stores," which would account for their violent philanthropic (?) tenderness being brought to bear on the respectable but struggling tradesman. I remain, dear Sir, yours truly,

A SOUTH-WALES CHEMIST.

Export of Perfumery.

SIR,—I should like to point out the rather heavy burden under which a small manufacturer of perfumery labours in

comparison with his more wealthy confrere.

I had an inquiry some two or three weeks ago as to the best terms on which I could supply my lavender water to a firm in Melbourne, Australia. I inquired of the Supervisor of Excise what the drawback would be, and after two or three days for his correspondence with Somerset House, was told that no drawback could be allowed off perfumery made with duty-paid spirit, unless the said perfumery was made and bottled in a bonded warehouse. It is needless to say that to a small manufacturer with only a comparatively small order for export this use of a bonded warehouse is quite impossible, and it seems to me a barrier to his being able to make himself an export trade. In consequence of not being able to export goods duty free, I shall lose the order, 50%. in value. I think it would get over the difficulty if the Excise would allow a parcel of perfume to be sent into a bonded warehouse, and from this parcel take a sample and verify the strength in comparison with the declaration accompanying Could you obtain through your columns the the goods. opinion of other small manufacturers and users of spirit, and suggest some remedy for, I may say, this unfair state of things?

Yours very truly, Pulborough. W. T. MADDOCK.

Chemists and Royalty.

SIR,—In your issue of last week you gave publicity to a letter headed "Chemists and Royalty," signed by a person using the nom de plume of "Pharmacist." I being without doubt the "Mr. Chemist" referred to, would have treated the letter with the silent contempt it deserves, especially after the exceedingly appropriate remarks added thereto by yeu, but there is one point on which I feel constrained to reply. "Pharmacist" says, "I have been very poorly ever since I read that paragraph," possibly he had not quite recovered when he penned his letter; out of charity let us hope so. If "Pharmacist" will kindly send me his address I will forward him a box of my antibilious pills, which have quite as great a celebrity as my lavender, and shall treasure any acknowledgment he may send as to their efficacy. If I succeed in | Or, instead of the child endeavouring to search the mysteries

curing him of his humours, I shall feel that I have not lived I am, yours truly, in vain.

46 Clerk Street, Edinburgh.

THOMAS FAIRGRIEVE, (246/17.) Pharmaceutical Chemist.

The Paste Pot.

SIR,-"Acid Tart's" hints on the management of the above have been read by your humble servant with much pleasure.

I remember when entering upon my duties abroad, how my eye was offended by the warty excrescences on the gumpot and brush, which was kept in a conspicuous position on the counter. I instituted paste made with starch, small quantities being made each time, the utensil and brush being washed frequently. Oftentimes the paste was made each morning, because my friends the rats licked the pot up clean during the night, and usually finished off by depositing the brush in a hiding-place of their own, without leaving word where they had placed it. The paste pot as devised by "Acid Tart" would have been a stumbling-block to my visitors.

I tried various remedies, such as creasote, carbolic acid, sulphate of eopper, and iron, in the paste, but the rats liked it—in fact evidently preferred the doctored article. I had them, though, when it came to the brush, for I tied it up to a string, and they never bit the string through.

It would not be a bad idea for "Acid Tart" to patent his paste pot and bring it before the trade-plenty of money has

been made on inventions quite as simple.

I have used gum bottles with the wire inside, which acts as a scraper for the brush.

H. E. C.

SIR,—Your correspondent's remarks about the sickening appearance of the paste pot are all very well in their way; but does he suppose the majority of paste pots are as unsightly as his used to be? I venture to hope they are not. It is very kind of him to publish his idea before patenting it, and I for one thank him.

We have had his notion for a number of years embodied in a piece of string of medium thickness, tied firmly over the centre of the top of the jar. The lid has a semicircle chipped out of it to accommodate the brush. This may not be such "a thing of beauty and a joy for ever" as his, but I think it is more practicable, inasmuch as the string can be removed to facilitate the cleaning of the pot, whereas the brass wire

By the way, what about the contents of the pot? I suppose this is such a simple matter, one dare hardly put a query concerning it. We make ours thus: flour, 3ij; P. starch, 5 ix.; acid salic. 5 ss.; water, 2 lbs., and find it keeps very well for a month or more. If any reader has a better form, will he kindly publish it, and oblige,

GGUUAAY Y FFAAUUX. (245/58.) Birmingham.

Rhymes for Pharmacists.

SIR,—We are a little bit too old-fashioned and conservative in the matter of our nursery rhymes. The same old ditties that did duty in our young days, and probably our grandfathers' before us, do duty to-day; and in these pre-eminently practical times it seems to me we might, with advantage to the minds and future prospects of our little ones, teach them something of a more practical nature than the senseless ditties with which their minds are now too often stored. If, for instance, instead of explaining to them the wonderful exploits of Master John Horner, who in a very rude and undignified manner partook of his mid-day meal, and who so freely expressed his own opinion of himself in such egotistical terms, we were to teach them something like the following :-

> Good Dr. Care'em Endeavoured to lure'em And vowed he could banish all ills, If only they'd buy And faithfully try Lis wonderful ointment and pills.

of the stars, and bidding them "Twinkle, twinkle" (which, by the way, they have done from all time and will do to the end of it), their minds were directed to some of the most successful of our eraft. Take, for example, something like the following:—

Beecham! Beecham! famous man, Oft I wonder how you can Soar so high above the rest; Sell your pills from east to west.

Man of push and business tact, Knowing when and how to act, Yours must be a paying plan. Beecham! Beecham! famous man.

Or we might well replace that well-known but senseless ditty beginning with "Sing a song of sixpence, a pocket full of rye," by something after the following style:—

Sing a seng of druggist's shop, Nothing in the till, Four-and-twenty different drugs Made into a pill.

When the pill was taken
The patient he looked blue.
Now wasn't that a funny thing
To make a sick man do?

Or, as a last example, suppose we transfer the child's sympathy for "Little Bo-Peep, who lost her sheep," to some of our unfortunate tradesmen, who are never tired of lamenting the advent of the stores, where some of their finest and fairest sheep have unfortunately wandered, in something like the following language:—

An M. P. S.
Found customers less,
And didn't know where to find them.
Awhile they may roam,
But soon they'll come home,
And leave the cheap stores behind them.

These are only a few examples of what can be done. The list might be extended indefinitely, and of course each trade could have words and style of composition to suit its own particular needs.

I will conclude these few rambling remarks by quoting a verse I remember reading some years ago in an old magazine, and the remembrance of which has no doubt given rise to the present train of thought.

Master John Horner,
Of Latin no scorner,
In a book of declension did spy
How nouns there are some
That ending in "um"
Do not form their plural in "i."

Now, sir, that erowns all, and so I will conclude, and subscribe myself

ACID TART. (204/57.)

Tilbury Fox's Nux Vomica Hair Lotion.

27/241. In reply to "E. H. S." Mr. Francis Carter (Carshalton) sends the following formula:—

Tinet. uncis vom. Aceti. dest. .. 3ijss. Tinet, capsici 3j. ٠. Tinet, conthar. .. ъvј. . . Sp. rosmar. 3i. Aq. rosæ ad M. ft. lotio.

In answer to 27/241, the formula for the Nux Vomica Hair Lotion by Dr. Tilbury Fox is:—

 Tincture nuv vomica
 5iv.

 Tincture cantharides
 oijss.

 Lanolin
 3ijss.

 Acetic acid
 5iv.

 Rose water to
 3v.

 Mix and use as a lotion.

H. W. Perks.

This would seem to be a modification of the original, as

Dr. Tilbury Fox died before lanolin—nnder that name—had been introduced.]

Wholesale Pillmakers.

SIR,—In reference to the "Query for Wholesale Pillmakers," I would suggest to "Bland Pill" that he should be quite ready to meet his physician as to price. We well know that all branches of trade, wholesale and retail, are being conducted on new lines. Business must be done, as the Quaker informed his son. With regard to the article in question, which doctors frequently order in large quantities to their patients, every chemist knows at what cost they may be made by the gross.

Yours truly,

HEDER. (246/31.)

II. (Manchester) says:—It is well known that there are wholesale houses where a private individual will be supplied with drugs at wholesale prices, and may even have prescriptions dispensed; two recent eases coming under the writer's notice being a pound of bromide of potassium and a bottle for 2s., and a 6-oz. mixture for 8d. The former in a house where a large retail department adjoins the wholesale. It is to be feared that "Blaud Fill" has no security that some surgeon's house or wholesale pill-maker will not be found to fill such an order as that for a gross of Blaud's pills, especially when it is remembered that certain firms of this class appeal to the public by circular for direct postal patronage. It is only right to add that there are wholesale houses whose known rule is to refuse business with all who are not hand fide vendors, which in some establishments is read so as to exclude co-operators.

DISPENSING NOTES.

[The opinion of practical readers is invited on subjects discussed under this heading.]

Re Lanolin.

SIR,—Can you confirm me in my opinion that the waterabsorbing power of lanolin is much overstated?

It is said (in Messrs. Burroughs, Wellcome & Co.'s advertisement) that it will take up over 110 parts of water. I have tried to mix $\frac{1}{2}$ oz. of each, first by melting the lanolin, adding the water gradually, and stirring till nearly cold; and second, by rubbing in a mortar, adding water gradually as before; but in both eases a great part of the water remains quite separate, and the lanolin is covered with beads of water, which may be squeezed out by pressure.

I shall be thankful to obtain your opinion on the subject.

I am, yours truly,

АГРИА. (244/37.)

[Our experience differs from "Alpha's"; with a little care and in the course of twenty-five minutes we have incorporated 150 minims of water with 2 drachms of lanolin. We use the ointment slab and a steel spatula. Care should be taken to add only about 10 minims at a time, incorporating each portion before another is added. The resulting mixture is much stiffer than lanolin itself, and has anything but a watery appearance. It is quite possible that lanolin may take up even more water than we have stated; perlaps "Alpha" will try again, and ascertain how much more.]

The Illegible Prescription.

64/244. Juniper's rendering of this prescription is as follows:—

Twenty drops ex aquâ ter die Ed.

Pseudo-Chlorodyne.

SIR,—I should like your opinion concerning this prescription:—

Tinct. chloromorphiæ.. 3jss.

Cp. mxxx. om. nocte.

When dispensed first it was sent out as a "light yellow, thin liquid." and the bottle bore no "shake."

Perhaps some of the readers of your valuable paper may be able to say how prepared to be a non-separable fluid.

November 2. E. M. B. (244/63.)

[Mr Martindale terms his preparation Liquor Chloromorphiæ. It differs in strength and appearance from the official tr. chlorof, et morphine. Replies to "E. M. B." are requested.]

Camphor Pills.

SIR.—A day or two since the undermentioned prescription was given me to dispense. Not having had such a peculiar compound before, perhaps some of your correspondents may suggest an easy way of shortening the time in making the pills.

Ft. pil. vj.

I am, yours truly.

ASSISTANT. (243/73.)

[This is a good prescription for Minor students to practise on. Perhaps they will do so, and report. The cannabis and camphor should be rubbed together in the first instance.]

The Quinine Mixture.

SIR.—Perhaps your correspondents "W. G. B." and "H. W. Perks" will tell us how long they kept the mixtures they prepared from the formula I gave (p. 563). Not content with my own experiments, I asked a brother pharmacist to try to make a satisfactory compound; but the result was the same, and the quinine deposited most beautiful crystals within twenty-four hours. I did not mention that I had experienced any difficulty in making a clear solution. A permanent solution is to be made by using acid. nit. dil. Instead of acid. sulph. dil.

Yours truly,

Heder. (246/31.)

LEGAL QUERIES.

R. B. asks if an unregistered man can sell by retail a preparation of cantharides for the hair, and place on the label the word "Cantharides." without being liable to a fine under the Pharmacy Act.? Such a preparation would probably not be comprised within the description in the schedule of the Pharmacy Act. "Cantharides" is in the schedule, and so are "the tincture and all vestating liquid preparations thereof. Obviously this description would not include a stimulating pomade, for instance.

9/244. Tech asks if he is within the law inst come into operation. His lad, nearly 15 is employed from half-past eight till one, from half-past two till five, and from six till nine.

[That is twelve hours and a half per day, and if the lad is employed for those hours six days per week, he is, we should say, employed one hour beyond the legal limit.]

16/245. Quaero.—A person of full age can apprentice himself. The only difference between his case and that of a minor is that in the latter case his parents or guardians are responsible parties to the contract, while in the former case he makes himself responsible.

67/243. Tanoramus.—Whether it is worth while to employ an agent to get a trade-mark registered depends very much on the special circumstances of the case. Get a form for application from the Trade-Marks Office. Southampton Buildings, London, W.C., and lat the same time inquire of

an agent his terms and what advantages he offers. You will find an advertisement of such in this journal. Trade-mark law is getting a rather complicated business, so that there may be many cases in which an agent's guidance at the outset may be of considerable service.

MISCELLANEOUS QUERIES.

15/240. A. V. (Madrid).—Sealing Wax.—The best sealing wax is made by carefully melting in a clean copper pan over a charcoal fire 3 lbs. of shellac, and adding $1\frac{1}{4}$ lb. of Venice turpentine. For red sealing wax 2 lbs. or less of vermilion, and for black about $1\frac{1}{3}$ lb. of lampblack are added. The wax is either moulded or rolled on slabs. Sometimes a little halsam of Peru or styrax is added, and camphor or spirits of wine is occasionally added to improve the burning quality. For the common kind, bottle wax. as it is called, resin. 13: beeswax, 1; and ivory black or Venetian red, 3; are combined.

74/241. Sulphuric (Liverpool).—Get the part of Spon's Encyclopædia containing an account of indiarubber manufactures.

39/244. J. S. R—Assistants in American drug stores have to do much the same kind of work as those in English chemists' shops Their knowledge and general qualifications therefore have to be the same as here. If this answer seems trite please attribute it to the vagueness of your question.

30/244. Atramentum.—Copying Ink can be made by adding 6 or 7 drachms of sugar to a pint of ordinary writing ing.

 $4/242.\ Niger.—The nitrometer will be illustrated and described in our DIARY for 1887.$

Tincture of Henbane and Alkalies.—About twenty vears ago Dr. Garrod showed that caustic alkalies—such as liquor potasse—when mixed with this tincture, decomposed the alkaloid, hyoscvamine, and that the mixture failed to give the physiological effects of henbane.

32/237. Chocolate.—Thanks for your drawing, which was, however, received too late for insertion. At your leisure, please send us a larger drawing without writing on the paper.

Mahogany Varnish.—A varnish, which is very hard, although it takes a few days to dry, and takes on a good polish, may be made from the following recipe:—

 Gum animi (sorts)
 ...
 ...
 8 lbs.

 Linseed oil
 ...
 ...
 3 gallons

 Litharge.
 ...
 4 oz.

 Sugar of lead
 ...
 4 "

Boil all together until of a stringy consistency, then all to cool down somewhat, and add

Turpentine a sufficiency

About 5 gallons of turpentine are required to bring the varnish to a good consistency. $\,$

9/229. J. D.—Ung. Althee Viride:—

			,	Jz.
Cotton-seed oil .		 	 	40
Palm oil		 	 	16
Yellow wax		 	 	10
Green-elder ointme	ent	 	 	10

Melt the wax in the oil by the aid of heat, add the palm oil, dissolve and strain, then add the green-elder ointment and stir occasionally until cold.

55/238.—Siarl Ehen.—Waterproof Calico, or oilskin is made by saturating the calico with boiled linseed oil containing a tenth of its volume of gold size, or any other drier. The calico gets three coats of this, each one being allowed to dry in a cool place before another is applied.

66/243. Subscriber (Wolverhampton).—Caramel is best made by heating sugar to a temperature between 410° and 420° Fahr., over a parafiin bath, for instance. Before it can be used for colouring it must be purified. There are several ways of doing this: you may continue heating it at a temperature not exceeding 420° until water vapour no longer is given off, and when cold digest it for at least twice in alcohol—good methylated spirit will do; then disselve the residue in from ten to twenty times its weight of water, and, after several hours, filter. Or the fluid caramel may be dialysed. In this case the caramel, being a colloid, remains in the dialyser in a comparatively pure state, and may be diluted with water to the required strength. Another plan is to precipitate the caramel with spirit, collect, and wash it with the same, afterwards dissolving in water. We do not know of any book devoted to the subject.

47/240. Rheum (Cardiff).—Prepared Fullers' Earth.—A select quality of well-calcined earth is taken and digested for a day in hydrochloric acid (1 in 2); it is then washed repeatedly with water, to free it from acid, then dried.

39/233. Apprentice (Ilkeston). — Leather Dressing. — There are so many preparations which go under this name that we do not exactly know what you want. The following is for a simple dressing or dubbing suitable for boot-makers' stock:—

					Oz.
Whale oil			 	 	3
Resin			 	 ٠.	100
Turpentine			 	 	1
Soap			 	 	1
Powdered :	tragac	anth	 	 	1
Water			 	 	6

Dissolve the soap in the water, place the tragacanth in a mortar, and add the solution to it, stirring well until a uniform mixture is obtained. Dissolve the resin in the oil with the aid of heat, add the turpertine, and incorporate this with the saponaceous paste.

13/61. H.B.—Liquor Pepsin Co. c. Bismutho.—The following formula was published in this Journal a year ago, and gives a reliable preparation:—

Pepsin porci		 	••	ziij.
Acid. hydrochloric dil.		 		3iij.
Acid. hydrocyanic dil.		 		3ss.
Extr. opii liquid.	••	 		Зj.
Spt. chloroformi		 		3j.
Tinet. oardam. co.		 		Зij.
Liq. bismuthi		 		3x.
Liq. cocci		 		q.s.
Aquæ		 		q.s.

Digest the pepsin with the hydroobloric acid and 4 oz, of water for two days; decant the clear portion of the liquor, reserve, filter the remainder, and wash with water until the filtrate and the reserved portion measure 5 oz. Add the liquor bismuthi and sufficient cochineal to give the desired colour; then the rest of the ingredients make up to a pint with water, and after a day filter if necessary.

47/243. Cream.—Toothache Specific.—

Eucalyptus oil		 	 3i.
Mastic		 	 зij.
Camphor		 	 388.
Morphia (pure)		 	 3ss.
Chloroform (methy	lated)	 	 3ij.
Absolute alcohol to		 	 3v.

Digest until dissolved, and strain through muslin if necessary. A little tr. benzoin co. may be added to colour.

36/244. Argentum.—A very good Plate-powder is made from equal parts of precipitated chalk and heavy earbonate of magnesia, coloured with rouge—but better without. The secret of plate-powders is to use solution of ammonia along with them, and your label should say so. Ammonia and the above powder used together give excellent results.

44/240. Fee. Liquor Opii Sedativus.—The objects to be aimed at for a good liquor are to get rid of the narcotine and some otheralkaloids and a portion of the meconic acid: also to keep the liquor for at least a month—but longer if possible—in order that the fine aroma may develop.

```
        Opium 10 per cent.
        2 ož.

        Slaked little
        2 fractime

        Rectified spirit
        d.s.

        Water
        q.š.
```

Boil the opium (in small pieces), lime, and 15 oz. of water together for half-an-hour, then allow to cool, make up to 14 oz. with water, add 6 oz. of rectified_spirit, and set aside for seven days; filter, press the mare, and add sufficient proof spirit to make 1 pint.

66/243. Keeping Labels.—Pharmacist says:—"'Heder's' method for keeping labels is very good. I got the idea from Clay & Abraham's nearly twenty years ago, and it works well. I have a drawer 26×14 in which I have rather over 150 different slips, but my boxes are rather shallower than the ordinary $\frac{1}{2}$ doz. slide powder box."

28/224. Drinks.—We cannot judge of the formula of a preparation from the label, but evidently a soluble essence of ginger, such as that made by Mr. Hay, of Hull, would answer well to mix with a fermented solution of sugar to make a sort of ginger-wine. You might add caramel if you want more colour, and tincture of capsicum if you want more heat. You would require a licence to sell wine thus made, but we have never heard that the Inland Revenue want to charge a duty for the sale of flavouring essences, though it is possible that they have the power to do so. The same correspondent wants formulæ for raspberry or prune essences for making wines.

In reply to "J. M.," *H.* (Manchester) writes:—Liquor Tolutanus is best made by distilling the balsam with spirit and water, and adding sugar to the distillate.

32/237. Chocolate.—Worms in Dogs.—You will find this subject treated fully in this Journal, July 24 and 31.

CARBOLIC ACID POISONING.—A druggist of Omro, Wisconsin, named Henry, was fatally poisoned on Sept. 30 by swallowing carbolic acid in mistake for beef extract.

MEDICINE IN ZANZIBAR.—The Deutsche Kolonialzeitung publishes a long communication from "Emily Ruete, Princess of Oman and Zanzibar," begging female European physicians to go out to Zanzibar. What the state of physicians to go out to Zanzibar. medicine is in the Arab houses may be imagined from an account which the lady gives of a favourite prescription in severe cases of illness. In moderate sickness, she says, deeoctions of herbs are much used; but when a patient's ease is serious, the beliezing Moslem prefers to resort to "swallowing texts from the Koran. A person noted for piety is ealled to indite the text with a solution of saffron on a white plate; the writing is then covered with rosewater, and given to the invalid to drink. This medicine must be swallowed thrice a day, and care has to be taken that not a single drop of the sacred fluid is spilt upon the ground." The lady asks for physicians of her own sex because it is quite impossible for male doctors to exercise their art in the Arab harem. "No male physician," she writes, "would be permitted to feel the pulse, or even to inspect the tongue, of a female patient." Female physicians, on the contrary, would be readily welcomed, for the hearts of the Arab women are easily won to confidence. The ladies would not only do a good work, but they would find their offices well paid, and even profitable, from a business point of view. It would be necessary for them to learn a little of the Arabic and Suahelic languages in order to communicate freely with natives. "If a small society of duly-qualified ladies will but venture out," she concludes, "I will engage only too gladly to give all the help I can towards their instruction in these tongues, in the consciousness that I should thereby be serving my beloved land."—Pall Mall Gazette.

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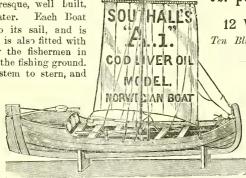
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CARTER'S LITTLE LIVER PILLS also cure all forms of Biliousness, prevent Construction and Dyspepsia, promote Digestion, relieve distress from too hearty eating, correct Disorders of the Stomach, Stimulate the Liver, and Regulate the Bowels. They do all this by taking just one ittle pill at a dose. They are purely vegetable, do not gripe or purge, and are as nearly perfect as it is possible for a pill to be. are as nearly perfect as it is possible for a pill to be, THEY ARE A SPECIFIC FOR SICK HEADACHE. In phials, price is. 1½d., of all chemists. British Depot, 46, Holborn Viadnet, London, E.C. Illustrated descriptive pamphlet post free to any address.



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Sold in tin cans for Mechanics and Amateurs. Half Pints, 1s. 6d.. Pints, 2s. 9d.. and Quarts, 4s. 6d. each, and in bottles for family use, at 6d. and 1s. Samples free by post on receipt of stamps or postal order. Sold by the wholesale trade generally, and retailed by Stationers, Fancy Goods Dealers, Grocers, Ironmongers, Chemists, etc., etc. Depot: 46, Holborn Viaduct, London, E.C.



Chemists desiring Show Cards and Printed Matter relating to PERRY DAVIS' PAIN KILLER, SOZODONT, LACTOPEPTINE. POWELL'S EM-BROCATION, HIMROD'S ASTHMA CURE, and other Medicines controlled by me will oblige by making application for same.

JOHN MORGAN RICHARDS.





ANGLO-NORWEGIAN

Samples and quotations on applica-Cod-liver Oil has never been so cheap as this season.

Small samples for distribution to Medical Men and others supplied gratis.

LESCHER EVANS, 38 WEBB. 60 Bartholomew Close.

LONDON.

Manchester, Birmingham, Liverpool, Montreal, Paris, Sydney, Victoria, and British Columbia.

Their Export Lists, Spanish and English, form an excellent advertising medium for Proprietaries. Circulated to the Trade in every quarter of the Globe.

8d. PER

SUPPOSITORIES BOUGIES PESSARIES

Any strength, and prepared from own formulæ. 1 doz. upwards. Export orders specially prepared.

Liberal Discount to Wholesale Houses for one gross and upwards.

PER.

CHEMICAL FOOD (Best Quality only). By the Winchester, 7d.

Sample lb. to any house in London for 10 stamps.

MESSRS. GILSON & CO.. 28 Milkwood Rd., Herne Hill, LONDON, S.E.

THOMPSON'S "EXCELSIOR" GELATINE PILL-COATING MACHINE.

(REGISTERED.)

This is the first and only perfected Machine introduced as yet of British manufacture for Gelatine Pill Coating (videpage 246 of this Diary). The Machines are supplied with 100 slides, containing 28 needles on each, one grooved inclined plane and suitable grooved boards for holding the slides. This machine is also adapted for making Flexible Gelatine Capsules.

FOR PRICES AND PARTICULARS APPLY TO

JAS. ROBERTSON & CO., 35 George Street, EDINBURGH.

A MOST NOURISHING FOOD AND VALUABLE MEDICINE.

British Medical Journal—"Children take it well."

British and Colonial Druggist-"The Oil is much above the average, but little taste or smell, while rich in Iodine. It keeps better than the generality, is readily assimilable, and can be taken by persons of delicate gastric organisation without fear of returning.

Sole Consignees

and Bottlers.

Retail, Finest Selected, in Bottles only,

FORWEAKNES

 $\frac{1}{4}$ Pint, 1/;

 $\frac{1}{2}$ Pint, 2/;

1 Pint,

3/6;

Quart, 6/6.

RELIEF

INDIGESTION

CONSUMPTION,

■ Price in Bulk.

Original Cask, 4/6 per gallon. In Winchesters, per doz., at

6/- per gallon. Moz. same rate.

OF GUARANTEED PURITY.

NON-CONGEALABLE.

Prof. Sir Chas. Cameron..." A very pure article, quite free from rancid odour or nauseous

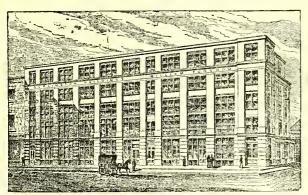
HERTZ & COLLINGWOOD, 101 LEADENHALL ST., LONDON.

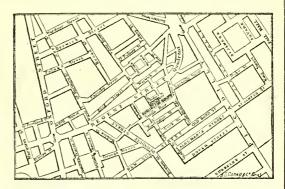
FROM COUGH IN TEN MINUTES.

THE SALE IS INCREASING DAILY.

IT HAS A MOST PLEASANT TASTE.

The most certain and speedy remedy for Coughs, Colds, Hoarseness, and all disorders of the Chest and Lungs. It has proved itself the most successful preparation ever offered. In the nursery it is invaluable, as the children are fond of it. Immediately it is taken coughing ceases, restlessness is gone, and refreshing sleep cusues. No lady who has once tried it would ever afterwards be without it. Prepared only by A. HAYMAN, Chemist, NEATH, and sold by all Chemists in London and throughout the Kingdom. Price 1s. 1½d., 2s. 9d., and 4s. 6d. per bottle.





WILLIAM TOOGOOD'S NEW PREMISES.

WILLIAM TOOGOOD,

WHOLESALE AND EXPORT

GLASS BOTTLE MANUFACTURER

AND

DRUGGISTS' SUNDRYMAN,

HAS REMOVED FROM

35, 36 & 37 MOUNT STREET, GROSVENOR SQUARE, W.,

HEDDON STREET, REGENT STREET, LONDON, W.

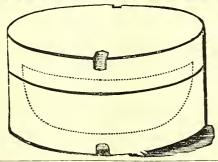
TOOGOOD'S IMPROVED PATENT

EARTHENWARE GOVERED POTS

Are claimed to be the most perfect and convenient yet offered to the Trade, and possess the following Advantages:—

1st.—An India-rubber Band passed vertically over the pot is kept in its place by the notches, and effectually secures the lid; for travelling this supplies a want greatly needed.

2nd.—The Covers being made quite flat, labels can be affixed with ease, and without creasing.



3rd.—The inside of the Pots being rounded or egg-shape, the contents can be entirely removed without waste.

4th.—Great attention has been paid to insure accuracy of contents.

PRICES, per gross.

AUSTRALIAN AGENCY AND SAMPLE ROOM:

Mr. A. I. JOSEPH, Bond Street, Sydney.

Telegraphic Address: "TOOGOOD LONDON."
Telephone No. 3834.

William Toogood's Price Current of Glass Bottles, Measures, Earthenware, Druggists' Sundries, &c., will be forwarded post free upon application.

SPECIAL ATTENTION GIVEN TO SHIPPING ORDERS.

THOMPSON, MILLARD & CO.



LIMITED,

CURTAIN ROAD, LONDON, E.C.

Telegraphic Address, "BEATROP LONDON."

T M M

WHOLESALE and EXPORT

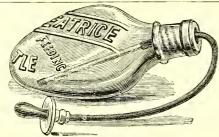
DRUGGISTS' SUNDRIESMEN, DRUGGISTS,

SURGICAL INSTRUMENT MAKERS, PERFUMERS, ETC.

Sole Proprietors of the "Mater," "Bristol," "Imperial,"

"BEATRICE" & "TROPICAL"

FEEDING BOTTLES.



THE "BEATRICE" FREDING BOTTLE.

With opal glass screw stopper, best black rubber fittings, each in handsome shouldered box arranged to stand the feeder in while filling, and tube and bottle brush, per dozen 8s., subject to usual discount. This Feeder combines the advantages of the straight and bent neck bottles, can be laid on either side without leakage, and is easily cleaned.



THE "TROPICAL" FEEDING BOTTLE.

THOMPSON, MILLARD & Co.'s new PATENTED
Boat-shape Feeding Bottle. Fitted with screw
glass stopper or metal screw cap at end to allow
of cleaning. In two sizes. Illustrated Price List
on Application.

WRITE FOR PRICE LIST OF CHEAP FEEDING BOTTLES, JUST ISSUED.

Special attention paid to Export Orders, and Illustrated Price Lists posted free to any part of the world on application.

Our goods give universal satisfaction, and buyers may with confidence favour us with a Trial Order.

IVI A VV S EARTHENWARE INHALERS

For Hot Water, Infusions, &c.



Fig. 8.

MAW'S IMPROVED.



FIG. 13.
ELASTIC TUBE.



Fig. 100.
MAW'S INVALID.



FIG. 8A.

MAW'S IMPROVED.

Fig. 8:-Marbled, 32s. per dozen.

Fig. 100:-White, 33s.; Gilt Lines, 39s. per doz.

This Pattern is specially adapted for use in bed.

Fig. 8a:-White, 21s. per doz.; Retail, 2s. 6d. each.

ELASTIC TUBES, as Fig. 13, will fit any of the above.

7 inches long, including Mouth-pieces 8s. per dozen.
9 inches long, including Mouth-pieces 12s. per dozen.

MANUFACTURED BY

S. MAW, SON & THOMPSON,

THE BEST & SAFEST DENTIFRICE.

OSCAR SUTTON & CO., Preston, Lancashire,



REGISTERED TRADE MARK.

The following Testimonial from Mr. James A. Reid, Chemist and Druggist, Helensburgh, we quote by special permission: "Enclosed please find cheque in payment for the Tooth Blocks. I am highly pleased with their new form and extra inducements presented through the leatherette labels and chemists own name stamped on each block. These give one special encouragement to keep prominently before an intelligent public what UNDOUBTEDLY IS THE GREATEST DENTIFICE OF THE AGE."

Loose, without Boxes.

In Patent Metallic Boxes, retail 1s.

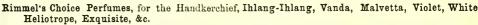
In Crystal Caskets, retail 2s. 6d.

OVER 1,000 TESTIMONIALS.

GOLD and SILVER MEDALS, Health Exhibition, 1884.

GOLD MEDAL, Antwerp, 1885.

Principal Specialities:



Heliotrope, Exquisite, &c.

Rimmel's Celebrated Toilet Vinegar, a Tonic and reviving Lotion for the Toilet or Bath, 1s., 2s. 6d., & 5s. Rimmel's Lavender Water, Florida Water, and Eau de Cologne.

Rimmel's Extract of Lime Juice and Glycerine, Queen's Pommade, Brillantine, and Philocome, for the Hair.

Rimmel's Violet-Scented Catmeal, and Violet and Rice Powder, for the Complexion.

Rimmel's Brown Windsor, Honey, Transparent, Coal-Tar, Glycerine, Army and Navy, Almond, Lettuce, White Heliotrope, Nice Violets, Tilia, and other Superior Toilet Soaps.

Rimmel's Carbodentine, White Rose Soap, and Coral Tooth Paste, for the Teeth.

Rimmel's Aromatic Ozonizer, Ozonized Toilet Waters, and Cassolette, the only agreeable disinfectant Sold by all Chemists and Druggists. The Usual Al'owance to the Trade. Perfumes Shipped in Bond at a Great Reduction.

EUGENE RIMMEL, Perfumer to H.R.H. the Princess of Wales, 96 STRAND, LONDON.

AND SOUND

JEWSBURY & BROWN'S ORIENTAL

This old-established and increasingly favourite Dentifrice has been over Sixty Years hefore the Public. It is warranted to retain its properties and keep in good condition in any climate. The original and only genuine is manufactured solely by

JEWSBURY & BROWN, Chemists, MANCHESTER,

and is distinguishable by the Trade Mark, printed in red and green, a facsimile of which is annexed. Particular attention should be paid to this guarantee of genuineness, as numerous imitations are offered. Sold universally by Chemists and Perfumers, at 1s, 6d, and 2s, 6d.

The Trade and Shippers supplied by the leading houses in London and elsewhere. Bills and Show Cards forwarded on receipt of address cards and directions for enclosure.

IMMENSE SALE. SOLD EVERYWHERE.

MARK/

As used and recommended by Madame Marie Roze, the Prima Donna.

PRICE, 6d. and 1s. per Pot.

CAUTION.-SEE "WOODS, PLYMOUTH," ON EACH POT.

WALNUT



A Triumph as a Hair A Triumph as a Hair
Darkener.
Easy to Apply.
Easy to Remove.
Once Commenced—always
Used.
As a simple, effective, pleasant, and
nourishing preparation it can be conscientiously recommended to a enstomer wnose hair is becoming greyred, or white.
Three Colours—Light Brown, Dark
Brown, and Black.

Brown, and Black.

Pots—\$\frac{3}{2}\$ oz. (1/6) 12/ per doz.

1\frac{1}{2}\$ oz. (2/6) 20/ per doz.

Agents—Barclay & Sons, Edwards & Co., Maw, Son & Thompson, and Sanger & Sons. Sole Manufacturer & Proprietor—

EUGENE MORPHY, 70 South Audley St., Mayfair,

LONDON

Shirley's Menthol Cones—A1 Brand



1.—6d. Glass Bottles, per doz. with metal screw caps. 12 in a hinged 3/6

1a.—Ditto, 12 on a card, as style 19.



In ordering, state distinctly A1 Brand.

2.-6d. Plain Willow Boxes, lid serving as a holder. 12 in a hinged box.

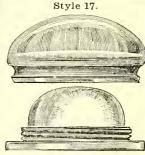


Style 4

Special terms to large buyers.

3. -9d. Glass Bottles with metal screw caps. 6 in a box.

5/4per doz.



DRAUGHTSMAN.

A flat preketable shape, made of Ebony and Boxwood, assorted 6/3 per doz. Do. Ebony only ... 6/9 Do. Boxwood do 6/ Do. Vegetable Ivory 7/

A VERY SALEABLE SHAPE.

Cones fitted to buyers' own 25 worth of A1 MENTHOL will boxes.

 4.—1s. Glass Bottles. with metal screw caps (Menthol on wood mount serving as a holder). 6 in a hox. or on a card.

6/9per doz.



5.-1s. Glass Bottles. with metal screw 6/9caps (bullet-shaped Cones, wrapped in tinfoil). 6 in a box, or on a card.

per doz.

BE SURE TO READ THE OTHER SIDE.

realise 48', or a profit of 23', which Order distinctly as A1 Brand. is over 90 per cent.

Send a cheque for 25/ and I will forward either of the following, together with a HANDSOME GLASS-FRONTED SHOW CASE and ROUND HANDBILLS.

Parcel A.	Parcel B.				
4 dozen 6d.	3 dozen 1s.				
2 ., 1s.	2 " 6d.				
Parcel C.	D1 D				
rarcei C.	Parcel D.				

Order as Parcel A, B, C, or D 14a.-1s. Ditto 11a ditto.

Price List post free on application.

6.--9d. Boxwood, ordinary shape, on pedestal (screw lid). 6 or 12 in a box.

5/ per doz.



Guaranteed Pure Japan Menthol.

7.—1 ε . Boxwood, barrel-shape, screw lid. 6 or 12 in a box. per doz.

6/



Important to Shippers.—The screws or the boxwood shapes are not affected by change of climate, the wood being thoroughly seasoned.

Boxwood. acorn-shape, screwlid 6 or 12 in a box.

6/per doz.

4/



.—1s. Boxwood, shape, screw lid. in a box.	skittle- 6 or 12	per doz.

a.-1/6. Extra large skittle. 6 or 12 in a hox. 7/9

11.—6d. Boxwood pedestals screw lids, each in a separate box, 12 of which are enclosed in glass slide outer.

11a.-Ditto, 12 in a box, without separate cardboard boxes and onter.

3/6 14.—1s. Same shape and get-up as 11, only larger.

6/3





Style 12.—6d. Polished American Birch, "pull off" lid shape as No. 6. 12 in a box, 3 6 per dozen.

Style 13.-1s. Vegetable Ivory, acorn shape. 12 in glass outer, 6,6 per dozen. Vegetable Ivory, Style 13a.—1s. Vegetable Ivory, in plain hinged hox. 63 per dozen.

Style 16.-A fancy pattern tyle 16.—A lancy pattern of electro-plate, boxwood, and ehony. 12 in a box. Not suitable for hot climates. 6.9 per dozen.



Style 10.—6d. Menthol. in oblong willow cases, with red labels. 12 on a card, very saleable. 3 6 per dozen.



Style 19 .- Pocket Menthol. The cases are made of boxwood, in the shape of an egg, screwing in the middle, and arranged on an attractive show-card, with easel hack. 3/ per dozen.

MENTHOL commands a sale all the year round; in summer for Headache, Faintness, &c., and in winter for Neuralgia, Rheumatism, &c.; therefore, always stock and push it.



-6d. Menthol in cardhoard Style 15.-6d. Menthol in cardhoard cases. 12 in a show hox, front of which drops to display the articles. 3/ per doz

Sell pure, unadulterated articles, and you are sure to give satisfaction to your customers. stock no Menthol but SHIRLEY'S A1 Brand, purest, best, and most effective.

INCREASE YOUR PROFITS BY SELLING MENTHOL. SHOW CASE GRATIS.

Order as A1 BRAND from your Wholesale House, or direct from J. G. SHIRLEY, 30 Paternoster Square, London, E.C.

Telegraphic Address_"MENTHOL LONDON."

There is a lot of inferior Menthol about, so

Reware of Cheap Brands.

COTTON WOOL.

We hold a large quantity of the above, of good quality, which we beg to offer at the exceptional low price of 7/7 per 7 lbs., subject to 10 per cent. and 5 per cent. at a month,

BEST VIAL AND DISPENSING CORKS

Samples enclosed free of charge. In three g oss bags—Vial at /8, /10, 1'- per gross Dispensing, 1/1, 1/5, 1/9, subject to our discount, as above.

Special quotations for large quantities.

RESPIRATORS.

Handsomely got up, each in a glass top box convenient for show on the counter. 7/3, 12/-, 20/-, 28/-, 40/- per dozen, subject to 10 per cent, and 5 per cent, at one month. Extra narrow, suitable for ladies, at the same prices as above.

J. SANGER & SONS, 489 OXFORD STREET, LONDON, W.

1,000 HANDBILLS.

SPECIAL

NOTICE.

1,000 HANDBILLS.

HIMROD'S CURE FOR ASTHMA.

We can now supply 1,000 4to Handbills of superior quality, with name and address, and printed on one side only, with order for ½ dezen direct from

J. SANGER & SONS, 489 OXFORD STREET, W.

THE SPECIAL ATTENTION OF THE TRADE IS CALLED TO

BENZINE COLLAS

Which is acknowledged on all hands to be the most reliable Preparation for removing Grease, Oil, Tar, Wax, or Paint from every description of Wearing Apparel or Household Stuffs. It neither injures the colour or texture, nor leaves any odour or stain. It is neatly got up, and is a most saleable article. Observe the word "COLLAS" on label and cap.

1,000 Handbills, with Name and Address, will be printed for any Chemist who gives an order for £1 WORTH of BENZINE COLLAS at the following prices, viz.:

6d. Size, 4s. per doz., subject to Discount.

SPECIAL QUOTATIONS TO SHIPPERS AND BUYERS OF 6 DOZEN OF ANY SIZE AND UPWARDS.

J. SANGER & SONS, 489 Oxford St., London, W.

ROBERT GIBSON, MEDICATED LOZENGE

Carlton Works, Erskine Street, Hulme, MANCHESTER, and 1 Australian Avenue, LONDON, E.C. EXPORTER OF

LOZENGES, BOILED SUGARS, & JUJUBES TO ALL PARTS OF THE WORLD.

SEE PAGE ADVERTISEMENT, JANUARY 15, 1836, No. 110.

SOLE AGENTS FOR UNITED STATES-WRIGHT & RICH, NEW YORK.

W. EDWARDS & SON,

157 QUEEN VICTORIA STREET, LONDON,

WHOLESALE AND EXPORT DEALERS IN

Patent Medicines and Proprietary Articles,

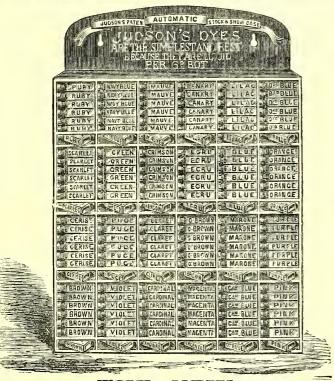
ENGLISH, AMERICAN, FRENCH, &c.

SOLE AGENTS for ROCHE'S HERBAL EMBROCATION,

Burchell's Anodyne Necklaces, Ford's Balsam of Horehound, Widow Welch's Pills, by Mrs. Smithers, Oxley's Essence Ginger, and the preparations of Messrs. Hudson & Son, late of the Haymarket, London.

PRICE LISTS SENT ON APPLICATION. ORDERS CAREFULLY AND PROMPTLY EXECUTED.

THE LATEST INVENTION!!!



THE NEW

PATENT SHOW CASE,

SHOWN IN THE ABOVE DRAWING,

Is made to hold 7 Bottles of each of the 24 Leading Colours of

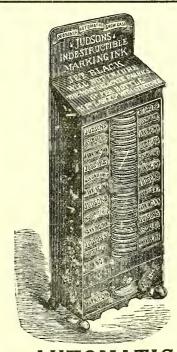
"JUDSON'S DYES."

CASE WITH CONTENTS COMPLETE,

4-8/- (subject).

This is the most attractive and convenient Show Case ever offered to the Trade; may be hung up, or will stand on counter.

The Bottles are so arranged that when one is removed another immediately takes its place.



SHOW CASE,

TO CONTAIN

3 dozen 6d. and 3 dozen 1s.

OF

JUDSON'S "INDESTRUCTIBLE"

MARKING INK

PRICE COMPLETE WITH CONTENTS,

36/= (subject).

To stand on counter, or may be hung on wall.

Wherever these Cases are shown the sale is very large, and this Marking Ink, which is an entirely new invention, is the only Marking Ink ever invented that is absolutely indelible.

DANIEL JUDSON & SON, LIM.

77 SOUTHWARK STREET, LONDON, S.E.

FOLLOWS & LIM., Engineers,

MILL.

Dutton Street Works, MANCHESTER.



APROVED & LATEST MACE



DRUG GRINDERS

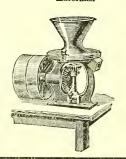
Chemists & Druggists

VIENNA, 1873

PARIS, 1878.

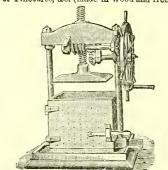
DRUG MILL.

For Ginger, Roots, and all kinds of friable materials.



COMPOUND PRESS.

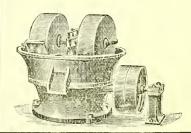
For Tinctures, &c. (made in Wood and Iron),



POWER EDGE RUNNER

MILL.

With Iron or Granite Rollers and Bed.



MANUFACTURERS OF

Metallic Casks, Drums, & Kegs

TIN CANISTERS AND BOXES,

FOR PACKING CHEMISTS' AND DRUGGISTS' SUNDRIES,

ENAMELLED SHOW CARDS.

IRON BARRELS, CAPACITY 40 TO 120 GALLONS
AS PER ILLUSTRATION.

Cable and Telegraphic Address-

"NOAKES LONDON."

..........

These large Iron Casks, similar to sketch, can be handled with equal facility to wooden barrels, and, owing to their strength and durability, can be used over and over again for an indefinite period. They are perfectly liquid tight, being tested at a very high air pressure, and, unlike wood, do not absorb any of the contents. They are all fitted with interchangeable screw bungs, and can also be fitted with screw plug in head, for draw-off tap.

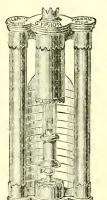
and can also be fitted with screw plug in head, for draw-off tap.

They are specially adapted for all kinds of Chemical Products, Sulphuric Acid, Glycerine, Spirits, Oils, Turpentine, Petroleum, Benzoline, Varnishes, Tar, Naphtha, Mineral Extracts, and Inflammable Liquids of every description.

We are making them in three qualities, "Black Iron," "Lead Coated," and "Tinned."

PRICE LIST ON APPLICATION.

BERMONDSEY. Offices ROAD. 142 SPA LONDON. S.E. and Works:



THE SYPHON" (REGISTERED TITLE)

(CLARK'S PATENT)

GAS HEATING STOVES.

NO FLUE REQUIRED.

NO FLUE REQUIRED.

No smoke, Nosmell. No dirt or trouble. No danger, All sulphurous vapours are condensed inside the Stoves, and passed off as a liquid into tray beneath. The ONLY SAFE ones for use in Hospitals, Sick Chambers, Greenhouses, Bedrooms, Halls, Shops, Offices, Churches, Schools, &c. BEWAKE OF IMITATIONS.

Price Lists and Terms on application to

S. CLARK & CO., Patentees

(Late Hygienic Heating & Lighting Co.),
Park Street Works, Islington,

Agents: MAW, SON & THOMPSON, Aldersgate Street, London, E.C.

BAILEY'S MINTON-WARE BOWL DRUG MILL.

(CARR'S PATENT.) FOR HAND OR POWER.



Diameter of Bowl, 18 inches. Price, £11. Lists, &c., on application.

Mr. J. Dutton, Rock Ferry, Birkenhead, says. "The Mill you sent me answers admirably for powdering all kinds of Salts, and for many other things, such as Opium, Scam-mony, Soap, Almonds, Mace, &c. It also effects a great sayacc. It also enects a great saving of time and labour in mixing various Powders, such as
Tooth Powder, Lemon and
Kali, &c., and proves a very
useful apparatus in the shops.

W. H. BAILEY & CO., ALBION, Salford, MANCHESTER,



MANUFACTURERS

SILVERMEDAL I.H.E. 1884.

THE N. C. Cos. PACKAGES HAVE STOOD THE TEST FOR MANY YEARS, AND ALWAYS BE RELIED UPON TO GIVE SATISFACTION.

TOCK BY ALL WHOLESALE DRUGGISTS &c.



ARE THE BEST AND MOST ECONOMICAL.



SOAP ALREADY IN GREAT DEMAND ON THE CONTINENT, PACKED IN

ELEGANT GLOVE or HANDKERCHIEF BOXES CONTAINING

12 TABLETS, weighing each about 5 oz., price 3/0 per box. price 1/9 per box. 6 TABLETS, WHOLESALE PRICES ON APPLICATION TO

6 LOVE LANE, ALDERMANBURY, E.C.



THE SANITARY DISINFECTING COVER

(GREENBURY'S PATENT),

For Slop Pails, Commodes, &c.

This cover has a chamber which can be filled with Condy's Fluid or other Disinfectant. By pressing the ball in handle a spray is injected, sufficient to disinfect or deodorise the contents. Sizes—72", 84", 82", 91", 92", price 6,6; 10", 102", 102", 7/ each, subject.

MILNE, SONS & MACFIE,

2 King Edward St., Newgate St., LONDON, E.C.

Matthews's

the Royal Nurseries, and highly recom -

lers 6d. & 1s.
Boxes.

mended by the Faculty; it protects the Skin from cold winds, chaps, &c., and preserves the Complexion.

SOLD BY ALL THE WHOLESALE HOUSES.

ROUSE & CO., 12 WIGMORE STREET, LONDON.

FOUND DEAD

BY SANFORD'S RAT POISON.

BY SANFORD'S RAT POISON.

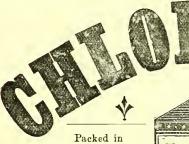
"I have found 145 rats killed in my farm buildings by it."—C. Wilson, Offord.

"It is the most certain remedy I have ever tried. Little pellets about the size of a pea are put in the rat holes or in their runs. I destroyed over 200 rats from one dressing with it."—C. Cook. Grance Farm, Ellesinere, Salop. It is, without doubt, the best ever introduced. Price 6d., 1s., 2s., and 3s., of Chemists.

SANFORD'S MICE POISON for Houses, Buildings, Corn Stacks, &c. Cannot be excelled. If as given entire satisfaction for the past 2s years. In packets 3d., 6d., 1s., and 2s. each, with directions for use. of Sanford & Son, Sandy, Beds, Liberal terms to Chemists. Wholesale of Barclay & Son, Sanger & Son, Newbery & Sons, Edwards, and others, London (England).

CONTAINING

PACKETS



uniform-sized Boxes at

he following prices:-12 doz. 1d. size 8/_ " ¼-lb. " ... 8/-1/2-lb. ,, 7/6 ,, " 1-lb. " 7/-Assorted Boxes, containing 1-lb., 12 $\frac{1}{2}$ -lb., 16 $\frac{1}{4}$ -lb., 32 1d. size, 7/9.

Above Prices are subject to usual Wholesale discounts.



Our Packets

are air-tight, water-

proof, neat, and clean, with full directions for Disinfecting and Bleaching purposes, containing Lime of best quality and full Chlorine strength.

FOR EXPORT

they are specially suitable, and we can with confidence recommend them.

Samples on application.

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Victoria Street, Port Eglinton, GLASGOW.

42 CHEAPSIDE. LONDON.

Telegraphic Address-"CHLORIDE GLASGOW."

DR. G. H. JONES, F.R.S.L., &c., SURGEON-DENTIST,

57 GREAT RUSSELL STREET, LONDON (Facing British Museum entrance),

Will forward his New 64-page Pamphlet, entitled "PAINLESS AND PERFECT DENTISTRY," which contains a List of the Diplomas, Gold and Silver Medals, and other Awards obtained at the Great International Exhibitions, to any part of the world, gratis and post free. Agents Wanted.

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Registration and other business connected with Trade Marks in the United Kingdom and Foreign Countries and Colonies.

LLOVD'S EUXESIS.

For SHAVING without SOAP, WATER or BRUSH, And in one half the ordinary time.

AIMEE LLOYD 3 Spur Street, Leicester (Widow of A. S. LLOYD)

Square, LONDON.

Takes Starched Linen like new. Does not stick to spider-like Materials. nee tried always wanted. Used in the Royal Laundries. Sold everywhere, in Packets, 1d., 3d., 6d., and 1s. each. Write for quotations.

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THE NEW CARBOLIC SANITARY CO., LIM. HACKNEY, LONDON, MANUFACTURERS OF

Carbolic Acid, Fluids, Soaps, Powder, Carbolated Creosote, Sheep Dip, and Chloride of Lime,

IN AIR-TIGHT PACKAGES.

Telegraphic Address_"NOOTIGINE LONDON,"

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Export and Home Trade. Finest quality at lowest possible prices. Samples free anywhere.

BROTHERS. **EDGELL**

4 BRABANT COURT, PHILPOT LANE, LONDON, E.C.

THE PERFECT SURGICAL BANDAGE.

Preferred to all Makes hitherto used. In Cases of Twelve Six-yard Rolls, 2 inches wide, 3s. 9d.; 2½ inches, 4s. 6d.; 3 inches, 5s. 6d.; or, Case containing twelve Six-yard Rolls of each width, 13s.

Free by post, to any address in the United Kingdom, for prepaid orders only.

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Bole Hall Mill Company, Tamworth, Staffordshire.

POWELL & BARSTOW,

5 Albion Place, Blackfriars Bridge, London, S. E., Late W. HURLSTONE & CO., Blackfriars Road and Vine Street, S.E., MANUFACTURERS TO THE WHOLESALE TRADE OF

ELASTIC GUM SURGICAL INSTRUMENTS

WORKS, LAMBETH.

ESTABLISHED 1830

Cheapest Sellers in the Market.

Chemicals, Drugs, and Oils at lowest market rates, APPLY TO

AUG. LEVERMORE & CO., 8 LIME STREET, LONDON, E.C.

PETROLEUM EQUAL TO AND CHEAPER THAN VASELINE.

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THE CHEAPEST AND BEST DISINFECTANT.

BREASE. PITCH, ASPHALTE, AND ALL PRODUCTS OF TAR AND ROSIN.

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Sample and quotation free on receipt of three penny stamps.

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..... 4/6 | One Dozen .. One Gross, 10 per cent. discount. One Bottle

FOR SALE BY ALL WHOLESALE AND EXPORT DRUGGISTS.

BATTLE & CO., 76 NEW BOND STREET, LONDON, W.

PERFUMES, No. 30.

FIFTY KINDS.

9s. for 20 oz., Carriage Paid.

Samples of any kind for 2 stamps.

When buying, compare my Perfumes with other makers', and buy the best.

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Can be obtained through the Wholesale Houses.

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USED EVERYWHERE FOR NEARLY 50 YEARS.

DAY & SONS' "PURIFIED DRIFFIELD OILS" (commonly called by Farmers "Days' Black Oils") for Wounds and Injuries of all kinds in all animals; anoluting in difficult Lambing and Calving, &c. Price 2.6 per bottle.

DAY & SONS' "BLACK DRINK," the renowned remedy for Colic or Gripes in Horses, Scour, Diarrhean, Debility, ec., in all stock. Price 18 per bottle, or 19/ per dozen.

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DAY & SONS' "WHITE OILS," for all External Injuries, Sprains, Swellings, Rheumatism, &c. Price 2.6 per bottle.

tism, &c. Price 2/6 per bottle, & SONS' "ALTERATIVE POWDERS," for Horses. Price 3/6 per Canister

UNIVERSAL MEDICINE CHEST, PRICE £2 4s., carriage paid.
which contains above five, together with four other, matchless medicines, and casy guide, "Everyday Ferriery."

Beware of Imitations and note our ONLY Address-DAY & SONS, CREWE, Cheshire.
WHOLESALE AGENTS: Messis. Burgoyne, Burbidges & Co.; Sanger & Sons; Evans, Lescher & Webb. London; Messis. Evans, Sons & Co., Liverpool, & c., & c.

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SPECIALITIES-Sweet Bloomless Mineral, Machinery, Animal, Fish, Vegetable, Wool, Axle, Harness, Curriers, and Patent (quick drying) Pale Boiled Linseed Oil. BEST BROWN YORKSHIRE, YELLOW LOCOMOTIVE, Contractors, Colliery Mill, and Shale GREASES.



MIXING MACHINES.



ALUM BAKING POWDER BARK BARYTES BONES CHARCOAL COAL DRUGS GLUE GLASS SLAG GINGER BEER POWDER GUANO GREAVES GRAIN HORNS AND HOOFS HORSE POWDERS KANITE LEMON KALI LIMESTONE LOCUST BEANS MYRAMBOLANES PHOSPHATES PAINT MATERIALS SAND SODA SUGAR CANES TOOTH POWDER VALONEA VIOLET POWDERS

WOOD

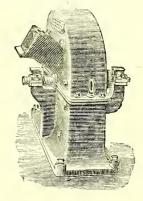
MACHINES are used

AΤ Inverurie Bishop Auckland Bristol Gateshead Southampton Glasgow Lydney London London Newcastle Tipton Plymouth Birmingham Liverpool Halesowen Birmingham Frome Birmingham Birmingham Hull Birmingham London Liverpool West Bromwich Middlesbrough Demerara Birmingham

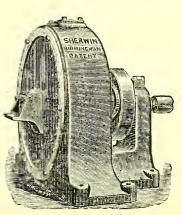
Bristol

London

Lyndhurst



GRINDING MACHINES.

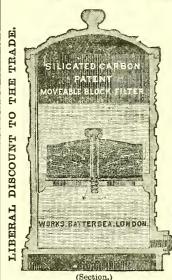


192 Almeh Street.

BIRMINGHAM.

PATEN.

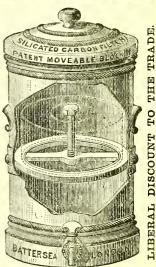
MOVABLE BLOCK



The Silicated Carbon Block can be instantly removed, leaving the whole of the interior of the Filter OPEN for inspection and cleansing.

The working parts are stoneware, and no corrosion is possible.

> No loose Pan or inner vessel to cause breakage.



(Elevation with Block removed.)

Domestic Filters (as above), in Cream-coloured Stoneware, with Plated Taps and Patent Movable Blocks:-

No. 27. O. ½ gal. 10/6 each. **,,** · 14/6 B. 2 21/-

52/-F. 12 70/-

D. 6 gals. 42/- each.

Dining Room Filters, in Marbled China, with Plated Taps and Patent Movable Blocks:-

> No. 22. A. 2 gals. 35/- each B. 5

,, 80/- ,, Refrigerative Terra Cotta, do. do. :-2 gals. 31/6 ,,

NEWEST AND

The water ascends in the direction indicated by the arrows, and each time the top glass is filled the air under the porcelain cover is forced through the Silicated Carbon Block, which is thus automatically aërated.

No. 38.

PLAIN GLASS.

No. O-1 Pint 2/6 each. 4/-B-35/6

SILICATED CARBON PATENT SELF-AFRALING ASCENSION FILTER MOVEABLE BLOCK

By simply removing the glass peg the Silicated Carbon Block is at once released for cleansing or renewal.

The Carbon Blocks are efficiently cleansed by boiling, and extra blocks can be supplied with each Filter when desired.

No. 38.

ENGRAVED GLASS.

3/6 each. No. O-1 Pint 5/6

7/6

FOR FULL ILLUSTRATED LISTS WRITE TO THE

SILICATED CARBON FILTER COMPANY, CHURCH ROAD, BATTERSEA, LONDON, S.W.

THE BEST PARAFFINUM MOLLE, B.P., IN THE MARKET IS

PURE, SWEET, NEUTRAL, NON-OXIDISABLE, UNCHANGEABLE.

Determined to give every possible inducement to the Consumer, the BINGHAMTON OIL REFINING CO. have authorised

REDUCTION STILL FURTHER

that Petrolina is now as cheap as any of the inferior jellies. Packed in oak kegs of 112 lbs., 56 lbs., and 28 lbs.; also tins of 14 lbs., 5 lbs., and 1 lb.; and in casks of 2 cwt. and 3 cwt.

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GEMUINE METALLIC POWDERS.

BRILLANTINE

AWARDED WITH MANY PRIZE MEDALS.

The best Polishing Powder in the World for Gold, Silver, especially Brass, Copper, Glass Plates, &c.

Put up in Boxes of about 4 ozs. (100 grammes) for Retailing at 3d. each, and in Packets of about 1\frac{1}{4} oz. (35 grammes) at 1d each. May also be had in bulk, packed in Casks and Bags, at lowest prices. Apply direct to the Manufacturer—

FRITZ SCHULZ, JUN., LEIPZIG, GERMANY

THE ABOVE IS THE ONLY ADDRESS FOR DIRECT PURCHASE TO ALL PARTS OF THE WORLD.

CONCENTRATED CALIFORNIAN



BORAX EXTRACT OF SOAP, BORAX DRY SOAP, ETC.

CAUTION .- BEWARE OF FRAUD.

"The Patent Borax Company have had to suppress three flagrant imitations of their specialities, . . . As all labels and titles possessed by this Company are registered in every possible manner for protection, it is surprising that other firms sho uld endeavour to imitate their manufactures, although, of course, successful articles always induce inferior imitations. The Company intend to prosecute all future imitators."—

**The Company Lyne 18, 1881* The Grocer, June 18, 1881.

"PROPRIETARY ARTICLES."

"We repeat once more, that the principle of all the decisions we know of, laid down again and again by Judges, and only modified in its application by the circumstances of each case, is that no man has a right to turn to his own profit the reputation or property which another man has ereated. Thus in Grillon v. another the Court restrained the defendant from selling under the name of American Tamar a preparation resembling Tamar Indien, though put up in an altogether different form from that of the latter article. The ground of this decision was that there could have been no object in using the word Tamar at all except to trade on the reputation in the name which the plaintiff had made, On a similar ground Mr. Eno obtained an injunction against a grocer restraining the latter from using the words fruit salt, fruit saline, fruit power, or any similar combination of words.
"Outer recently the Hon Bitters Company have obtained an injunction against

"Oute recently the Hop Bitters Company have obtained an injunction against certain chemists for using a label with the title, 'Hop Tonic Bitters,' the word Tonic being judiciously small. The Hop Bitters Company have spent at the rate of twenty thousand pounds per annum in advertising their article, and they have thereby created a substantial property. Mr. Henry George himself would not dispute their right to protection in such property; indeed it is the one kind of property which he would recognise. Everyone clee has a perfect right to make a bitter medicine, but the new article should win its reputation under its own distinctive title."—From The Chemist and Druggist, June 19, 18:6.

In these actions the plaintiffs obtained the endorsements in Court of their legal rights, while the defendants were justly punished for laying their hands upon and attempting to appropriate the property of others.

There was a time when the title to commercial property of this class_however costly the building up-was difficult to prove and almost impossible to upholo :— thanks to clearer commercial views and respect for trading rights in our Law Courts, the title deeds to propictary articles are now clearly cefined and independently. indisputable.

In directing attention to these remarks, and for the guidance of dealers in proprietary articles, we wish to point out that

"PREPARED CONCENTRATED CALIFORNIAN BORAX" was unknown until manufactured and introduced to the public by Mr. Arthur Robottom at the end of 1874. Since that date over twenty-six thousand pounds have been expended in popularizing the demand, which has now tempted some persons to put up fraudulent compounds in packets, or imitations they hope cannot be called fraudulent, but are still sufficiently near in the wording and style of the packet to deceive the public.

ear in the wording and style of the packet to deceive the public.

"Patent Borax Preparations have been the means of bringing a new, respectable, and profitable trade to grocers."—The Grocer, Sept. 12, 1885.

Dealers having doubts on the subject, and wishing to avoid legal damages, can easily settle the matter for themselves by asking if they ever saw Prepared Concentrated Californian Borax, or any Patent Borax Preparation, in packets, with uses and directions, o ffered for sale before the Patent Borax Company had created this new and important trade for dealers in household requisites, and established the value of these articles by a very heavy money expenditure.

The reply can only take one form, and that to confirm our statement; and we here give public notice that we are determined to protect our rights by strict legal means against all infringements. At the same time we wish to point out to Shopkeepe rs and others, that by offering imitations they become equally liable with the fraudulent makers.

The profitable and safe course is to refuse al

The profitable and safe course is to refuse al imitations, leave the frauds on the hands of those who offer them, and purchase only from the Discoverers, Proprietors, and sole Manufacturers,

The Patent Borax Company,

Patent Borax Works,

NEW MARKET ST., BIRMINGHAM.



Price List free on application. Borax Book, " Home and Health and Beauty," 66 Illustrations, containing Discovery, &c., published at 3d.; reduced price to the Trade for distribution. Sample copy free.

1886.

TWENTIETH SEASON.

THE



PROTECTOR

(REGISTERED).

"An Article of Acknowledged Excellence."

The "LUNG PROTECTOR" continues to be made only from the same Fine Soft Wool which has always been used since its introduction, 20 years ago.

Chemists are respectfully cautioned against imitations made from lower quality Wool, although sold as "Best Felt."









LUNG PROTECTOR.
ORIGINAL PATTERN.

LUNG PROTECTOR.

LUNG PROTECTOR.
THE CANADIAN.

CHEST PROTECTOR

PRICES:

	No. 00	No. 0	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7
Original Pattern, Nine sizes									
The American, Seven sizes	_	_	20/-	28/-	36/-	44 -	54/-	62/-	72/- ,,
The Canadian, Seven sizes	_	_	22/-	30/-	4 0/-	50/-	60/-	70/-	80/- ,,

FELT CHEST PROTECTORS.

Nine sizes 4/- 6/- 8/- 10/- 12/- 16/- 20/- 24/- 28/- per dos.

All in Scarlet and White, and made in same Wool as the "Lung Protector."

Terms: All Wholesale Houses either allow a large Discount for Cash, or quote the goods at Reduced Net Cash prices.

FELT CHEST PROTECTORS, C QUALITY, single and double, each in five sizes.

At lower prices than above, and equal to BEST of other makers, but are not recommended.

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